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Naval Undersea Warfare Center Division
Newport, Rhode Island

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IMAGING OF HUMAN HEART DATA

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ABSTRACT

This memorandum describes the processing and imaging of data collected during the first human tests of a volumetric array that uses passive sonar to locate arterial blockages in the coronary arteries. The data were imaged using conventional and reduced variance distortionless response focused beamformers. The images were studied to locate common features and to determine the most effective form of processing. Aliasing and noise in the data affected the images, and these effects were noted.

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The author of this report was employed at NUWC Division Newport during the summer of 1997 as an intern in the Summer Student Program.

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INTRODUCTION

Diagnosing heart disease, especially arterial blockage, has long been a difficult and potentially dangerous medical procedure. The most common methods used today are typically highly invasive and occasionally life-threatening. Much of the noninvasive diagnosis is done with the familiar stethoscope, which requires a sharp ear and is difficult to master.

This memorandum describes an alternative, noninvasive procedure to identify arterial blockages. This new procedure uses the principles of sonar to “listen” to the vibrations in a human chest. The listening device is a volumetric array composed of 15 sensors. Nine of these sensors are equally spaced along a primary axis. Six other sensors are spaced along a secondary axis perpendicular to the primary axis, with three on each side of the primary axis. The two sets of three sensors create two “wings” that are connected to the primary row of nine sensors with hinges to allow conformity to the chest surface. The sensors in the wings are equally spaced, with a larger space for the hinge.

The data recorded by this array are processed and imaged using both conventional and reduced-variance, distortionless-response (RVDR) focused beamformers. Initial tests were done in ideal laboratory situations using polyurethane blocks (frequently referred to as DAWGs) that contained simulated artery blockages. Later tests added “ribs” to these blocks to test the effects of reflection on the images. The images of the data produced from these tests indicated that the blockages could be identified consistently.

This memorandum discusses the processing of the data from the first round of human tests. The purpose of the imaging of this preliminary data was to explore patterns in the images; to identify the effects of ribs, tissue, and normal body sounds, and to provide answers as to the advantages and disadvantages of several different combinations of variables used in the processing. These variables included the length and number of fast Fourier transforms (FFTs) to use in creating the cross-spectral density (CSD) matrix and the number of channels processed when creating the images.

PROCEDURE

Raw data were collected from 10 volunteer subjects. Each subject underwent between one and four tests, each lasting approximately 60 seconds. Each test produced 15 channels of displacement data (see figures 1 and 2) and an EKG.

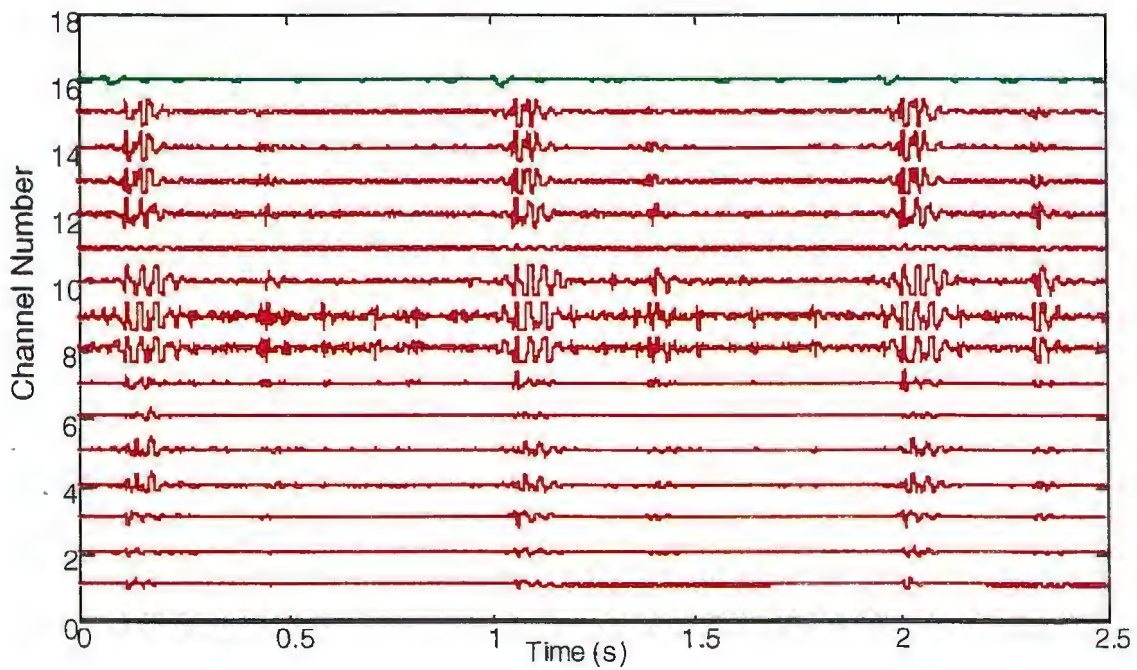


Figure 1. Data Sample with Very Little Noise

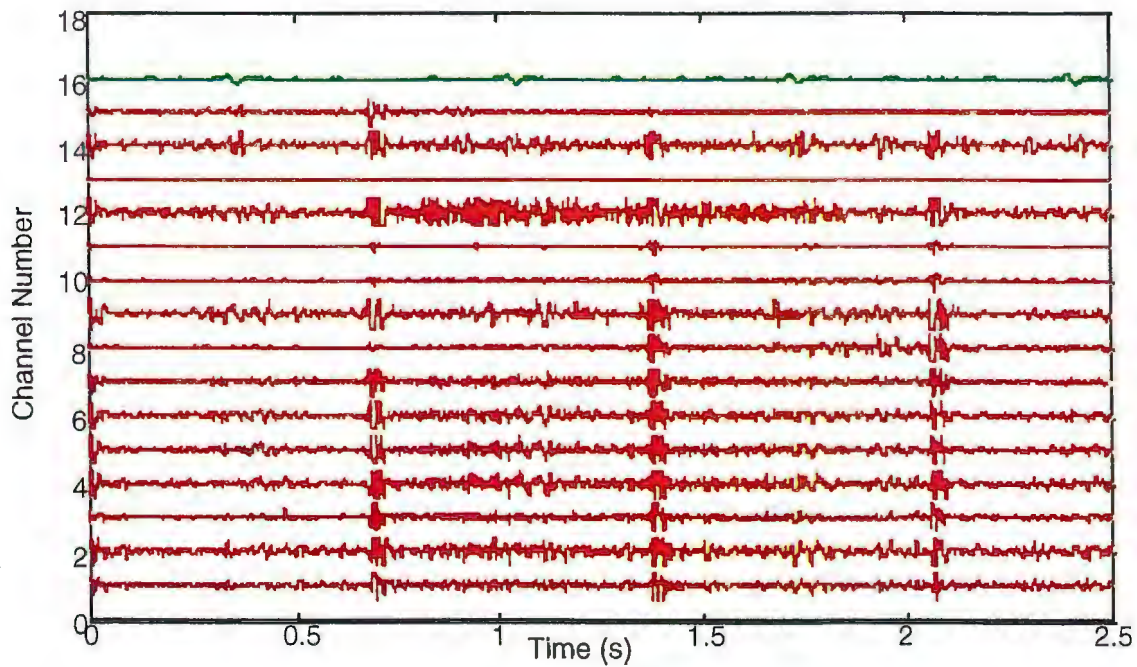


Figure 2. Data Sample with Significant Noise

Using the Matlab* program, the raw data were edited. Edited data sets required 16,384 data points or more, all taken from the diastolic phase of the heartbeat—the interval between the second heart sound (S2) and the following first heart sound (S1). The diastolic phase was identified in the data using the EKG, which enabled location of the S1 heart sound. During the middle of the diastolic phase, the largest amount of blood flows through the coronary arteries and there are no major valve sounds.

After editing, the new data sets were saved, and handwritten notes about the quality of the raw data were made. These notes, qualitative and subjective, made comments on the amount of noise in the samples and the ease of location of the S1 and S2 heart sounds.

Next, several CSD matrices were created from each edited data set. The CSD matrices differed in the combination of FFT length and the number of FFTs. Three different combinations were used: 16 FFTs with a length of 1024 points, 32 FFTs with a length of 512 points, and 64 FFTs with a length of 256 points. Qualitative observations on the computation time for each combination were made.

Finally, each CSD matrix was imaged using both conventional and RVDR focused beamformers. The matrices were imaged at 100, 200, 300, 400, and 500 Hz. In addition, each matrix was imaged using 9 channels and then using 15 channels (see appendixes A and B). This allowed evaluation of the effect of the “wings” of the array on the image. The wave speeds were as follows and remained constant for all images:

| | |
|-----------------------|--------|
| Wave Speed at 100 Hz | 4 m/s |
| Wave Speed at 1000 Hz | 12 m/s |

These values were selected based on literature values of 3.75 m/s and 13 m/s, respectively. The RVDR enhancement value was set at 6.0.

After the images had been created and printed, they were grouped and studied. The images were grouped according to the health of the subject (see table 1). Four of the subjects were determined to be in “good” health—which meant that the subjects had no prior heart disease and did not have unhealthy lifestyles. Three were smokers but had no history of heart disease. Two had previously experienced arterial blockages. One subject had heart disease unrelated to arterial blockage.

* All of the data processing was performed using Matlab for the Macintosh, version 4.2 programs written by Andrew Hull, Code 2141, that were based on an original developmental code written by Norman Owsley, Code 2123.

Table 1. Image Groupings

| Subject Number | Image Numbers | Health |
|-----------------------|----------------------|---------------------|
| 1 | 901, 902 903, 904 | blockage |
| 2 | 905, 906 907 | other heart disease |
| 3 | 908, 909 | smoker |
| 4 | 910, 911 | good |
| 5 | 912, 913 | smoker |
| 6 | 914, 915 916 | good |
| 7 | 917, 918 | good |
| 8 | 919, 920 921 | good |
| 9 | 922 | smoker |
| 10 | 923, 924 925 | blockage |

Each of these groups was then subdivided. Images were grouped according to the number of channels processed and the number of FFTs used to create the CSD matrix. Each subdivision was considered separately, and observations were made. If no characteristics of interest were noted in a particular image, no observations were made about that image. Characteristics of interest included localized spots (see figures 3 and 4), the approximate location of these spots (near the surface or deeper), a large amount of high energy (red and yellow) in the image, and streaking (which can indicate aliasing).

OBSERVATIONS

During the processing, the following trends were noted. Creating a CSD matrix using 16 FFTs of length 1024 consistently took a noticeably longer computation time than 64 FFTs of length 256. Once the CSD matrices were created, however, the computation time to produce the images was comparable. Many of the data sets contained significant random noise, which often obscured the S2 heart sound, making location of the diastolic phase difficult. The sets containing significant noise were 902, 904, 905, 906, 907, 908, 922, and 925.

The images all contained a high-energy area in the upper left corner, with the exception of images 923 and 925. This area was most distinct at 100 Hz. In some images, this area was distinct but rather small, surrounded by much lower energy areas. In other images, the high-

energy area spread across the image. Several of the images were almost entirely red, often with streaks of yellow, which made the identification of high-energy spots difficult and occasionally impossible. Images 923 and 925, at 100 Hz, had a very distinct high-energy area in the upper right corner.

When the images from those subjects determined to be in "good health" were sorted by format of CSD matrix and the number of channels processed, the following trends were noted:

1. In the group of images with 9 channels processed and CSD matrices of 16 FFTs of length 1024, none of the images at 100 Hz contained localized spots that did not continue outside of the image. At 200 Hz, the localized spots were primarily very small and located close to the surface of the chest, or the bottom of the image. A few spots were noted at 300 Hz, most of which were again located close to the surface. At 400 Hz, image sets 911 and 915 appeared rather streaky. All images at 500 Hz were very streaky.

2. In the group of images with 9 channels processed and CSD matrices using 32 FFTs of length 512, there were no localized spots at 100 Hz. At 200 Hz, some spots and elongated spaces of high energy were noted, mostly near the surface. There were no spots at 300 Hz. In this group, the images at 400 Hz were extremely varied, ranging from a distinct image with a single high-energy area to images completely formed of high energy. The images again appeared quite streaky at 500 Hz, with the possible exception of 921.

3. In the group of images with 9 channels processed and CSD matrices using 64 FFTs of length 256, there were again no spots at 100 Hz. At 200 Hz, there was a distinct localized spot in image 914. At 300 Hz, there was a spot in image 918. At 400 Hz, spots were located in images 911 and 920. The images all appeared streaky at 500 Hz with the exception of 915 and 921.

4. In the group of images with 15 channels processed and CSD matrices using 16 FFTs of length 1024, images 916 and 918 showed some spots at 100 Hz, all near the surface. Several images contained spots at 200 Hz, including 914, 915, 918, 920, and 921. At 300 Hz, the following images contained spots: 911, 914, 915, 916, 917, 918, 920, and 921. At 400 Hz, almost all of the images contained spots, and images 915 and 918 appeared somewhat streaky. All of the images were streaked at 500 Hz.

5. Of the images with 15 channels processed and CSD matrices using 32 FFTs of length 512, there were a few with localized spots at 100 Hz, including 910, 911, and 917. All of these spots were located near the surface. Images at 200 Hz with some spots located near the surface include 911, 914, 915, 917, and 921. At 300 Hz, spots mostly located near the surface were found in images 914, 916, 917, 918, 920, and 921. There were localized spots in all of the images at 400 Hz. All of the images appeared streaky at 500 Hz, with the possible exception of image 921.

Filename: 906_16_1024.csd
 Runname: 906_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

 Frequency 100 Hz
 CFB Surface Normalization (dB): 6.259
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 5.758
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

 Frequency 200 Hz
 CFB Surface Normalization (dB): 4.899
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 3.338
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

 Frequency 300 Hz
 CFB Surface Normalization (dB): 3.846
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 9.598
 RVDR Surface Normalization (dB): 2.318
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

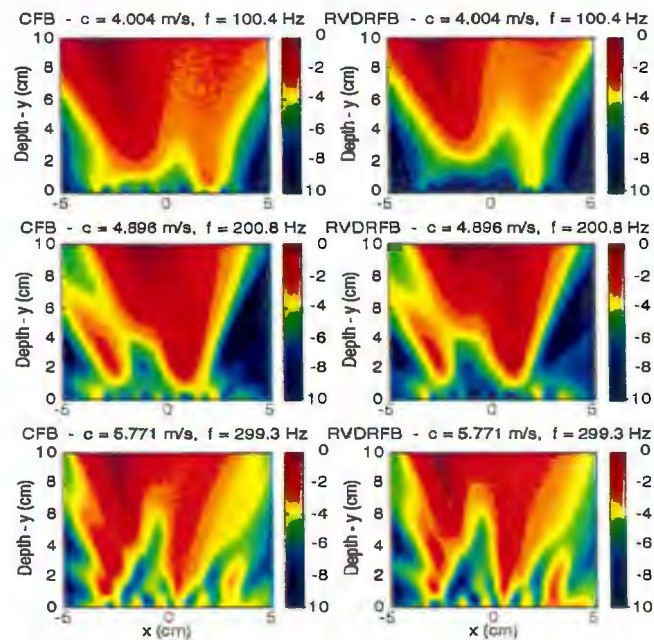


Figure 3. Example of Image with No Spots at 100 Hz (Top Images)

Filename: 906_16_1024.csd
 Runname: 906_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

 Frequency 100 Hz
 CFB Surface Normalization (dB): 5.509
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.808
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

 Frequency 200 Hz
 CFB Surface Normalization (dB): 4.7
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.385
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

 Frequency 300 Hz
 CFB Surface Normalization (dB): 2.968
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9908
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

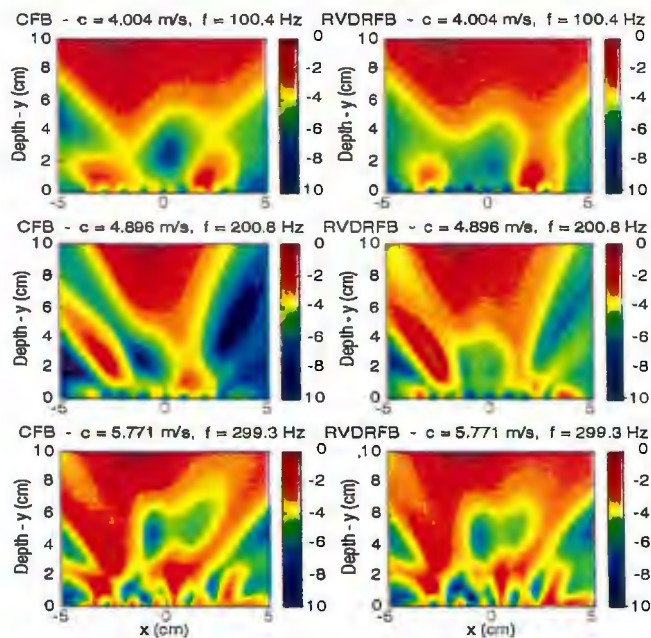


Figure 4. Example of Image with Surface Spots at 100 Hz (Top Images)

6. In the group of images with 15 channels processed and CSD matrices using 64 FFTs of length 256, images 910, 911, and 916 had some spots at 100 Hz, all near the surface. At 200 Hz, the following images showed spots at the surface: 914, 918, and 921. There were also some spots near the surface at 300 Hz in the following images: 914, 915, 916, 918, and 920. Many spots were seen at 400 Hz, in images 910, 911, 915, 918, and 921. The images at 500 Hz seemed to be less noticeably streaky, although there was still some evidence of streaking

The following observations were made on the images created from the smokers' data:

1. In the group of images with 9 channels processed and CSD matrices of 16 FFTs of length 1024, at 100 Hz, image 908 had a small surface spot. Both images 908 and 909 had small surface spots at 200 Hz. At 300 Hz, image 908 had an elongated high energy streak and small surface spots; images 909 and 922 had small surface spots and image 912 had several spots not at the surface. Image 913 appeared streaky. At 400 Hz, images 908, 909, and 922 were streaky. Image 913 contained multiple spots somewhat close to the surface, and image 912 had one spot not close to the surface. All of the images at 500 Hz were streaky, although image 908 was less streaky than the others.

2. With 9 channels processed and CSD matrices using 32 FFTs of length 512, none of the images contained spots at 100 Hz. At 200 Hz, image 909 had spots, with one not at the surface. At 300 Hz, image 913 appeared streaky, and image 922 was entirely high energy. At 400 Hz, images 908 and 913 seemed streaky, image 912 contained some surface spots, and image 909 contained several very small surface spots. Images 908 and 912 were very streaky at 500 Hz, image 913 was entirely high energy, image 909 did not appear streaky and had some spots, and image 922 had several spots not at the surface.

3. In the group of images with 9 channels processed and CSD matrices of 64 FFTs of length 256, at 100 Hz, image 908 contained a single spot near the surface. At 200 Hz, 909 contained a surface spot, and images 912, 913, and 922 were all very high energy. At 300 Hz, both images 913 and 922 were high energy, 912 contained some spots, and 908 and 909 both contained near surface spots. At 400 Hz, images 913 and 922 were entirely high energy, and images 908, 909, and 912 contained surface spots. None of the images were extremely streaky at 500 Hz. Image 913 was primarily high energy, appearing almost entirely red. Image 922 was slightly streaky and had some spots. Images 908 and 909 each contained some spots, with 908 having some nonsurface spots.

4. With 15 channels processed and CSD matrices of 16 FFTs of length 1024, the following images contained surface spots at 100 Hz: 908, 909, 913, and 922. At 200 Hz, image 908 was entirely high energy and 909 contained a surface spot. At 300 Hz, image 908 was again high energy, image 909 contained a nonsurface spot, image 912 contained a surface spot, and image 913 appeared streaky. At 400 Hz, images 908 and 922 appeared streaky and images 909, 912, and 913 contained surface spots. All of the images at 500 Hz were streaky, however, images 909 and 913 were less so.

5. Of all the images with 15 channels processed and CSD matrices using 32 FFTs of length 512 imaged at 100 Hz, only image 908 contained a surface spot. Only image 909 contained a surface spot at 200 Hz. At 300 Hz, images 908, 913, and 922 were high energy, and images 909 and 912 each contained a surface spot. At 400 Hz, images 908 and 913 were high energy, image 922 was a bit streaky and contained a surface spot, and images 909 and 912 contained surface spots. The images varied greatly at 500 Hz. Image 922 appeared streaky, image 913 was all high energy, images 908 and 912 contained surface spots, and image 909 contained nonsurface spots.

6. In the group of images with 15 channels processed and CSD matrices using 64 FFTs of length 256, images 908, 913, and 922 contained surface spots at 100 Hz. At 200 Hz, images 908, 913, and 922 were all entirely high energy, image 912 was mostly high energy, and image 909 had a surface spot. At 300 Hz, images 908, 913, and 922 were high energy and images 909 and 912 contained small surface spots. At 400 Hz, images 913 and 922 were high energy, image 908 had both surface and nonsurface spots, image 909 contained only surface spots, and image 912 contained surface spots but was rather streaky. Both images 908 and 913 were high energy, image 912 was streaky, and images 909 and 922 contained surface spots at 500 Hz.

The images from the group of subjects with previous arterial blockages led to the observations detailed below:

1. In the group of images with 9 channels processed and CSD matrices using 16 FFTs of length 1024, none of the images had a localized spot at 100 Hz. At 200 Hz, images 901, 902, and 923 each contained a surface spot. At 300 Hz, image 901 showed light spots—of a yellow color rather than red. Images 904 and 923 contained some spots as well. At 400 Hz, image 903 contained some surface spots and images 902 and 923 were streaky. Images 901, 902, 923, and 925 were very streaky at 500 Hz. Images 903 and 904 were less streaky and image 924 showed very little streaking. All contained at least one spot.

2. With 9 channels processed and CSD matrices using 32 FFTs of length 512, at 100 Hz, images 902 and 904 were almost entirely high energy, and image 903 contained a surface spot. At 200 Hz, image 901 contained a large spot, image 902 had a smaller surface spot, and image 904 was primarily high energy. At 300 Hz, image 903 contained a surface spot, and image 904 again was entirely high energy. At 400 Hz, images 901 and 904 were streaky, images 902, 903, and 923 contained multiple surface spots, and image 925 contained a nonsurface spot. Images 901, 903, and 925 were very streaky at 500 Hz, and the remaining images, which were not streaky, contained some small surface spots.

3. In the group of images with 9 channels processed and CSD matrices using 64 FFTs of length 256, at 100 Hz, images 902, 903, 904, and 925 were almost entirely high energy. Images 901 and 923 were mostly high energy at 200 Hz, although some spots were visible in image 901. At 300 Hz, image 903 contained a surface spot. At 400 Hz, image 901 appeared streaky, images

902, 903, and 904 contained several surface spots, and image 925 contained a nonsurface spot. Images 901 and 925 were streaky at 500 Hz. All of the images contained multiple spots at that frequency.

4. With 15 channels processed and CSD matrices using 16 FFTs of length 1024, images 902 and 923 each contained a spot at 100 Hz. At 200 Hz, image 901 contained a surface spot, and images 903, 904, and 925 each contained a nonsurface spot. At 300 Hz, images 901, 903 and 904 each contained a surface spot and image 925 contained multiple nonsurface spots. At 400 Hz, image 923 appeared a bit streaky, images 902, 903, and 925 each contained a nonsurface spot, and images 901, 904, and 924 contained surface spots. At 500 Hz, all images contained spots. Images 901, 904, 923, and 925 were extremely streaky.

5. In the group of images with 15 channels processed and CSD matrices using 32 FFTs of length 512, at 100 Hz, images 901, 902, and 903 contained surface spots. At 200 Hz, images 901, 902, 903 and 904 contained surface spots. At 300 Hz, images 901, 903, and 904 contained surface spots and image 924 contained a nonsurface spot. At 400 Hz, all of the images contained both surface and nonsurface spots. The following images were streaky at 500 Hz: 901, 903, 923, and 925. Images 902, 904, and 924 contained surface spots.

6. In the group of images with 15 channels processed and CSD matrices using 64 FFTs of length 256, images 901, 902, 903, and 904 all contained surface spots at 100 Hz. At 200 Hz, image 901 contained a surface spot, and images 902 and 904 contained nonsurface spots. At 300 Hz, image 925 contained a nonsurface spot. At 400 Hz, image 923 was a bit streaky and images 903 and 925 contained both surface and nonsurface spots. The following images were streaky at 500 Hz: 901, 903, 923, and 925. Images 902, 904, and 924 contained surface spots.

The final group of images studied—the case of “other heart disease”—is described below:

1. In the group of images with 9 channels processed and CSD matrices using 16 FFTs of length 1024, there were no localized spots at 100 Hz. At 200 Hz, image 906 contained a nonsurface spot. At both 300 and 400 Hz there were no distinct spots in any of the images. Images 906 and 907 were streaky at 500 Hz.

2. In the group of images with 9 channels processed and CSD matrices using 32 FFTs of length 512, there were no spots in any of the images at 100 Hz. At 200 Hz, image 906 contained a nonsurface spot. At 300 Hz, image 907 contained small surface spots. At 400 Hz, image 905 contained small surface spots. Images 906 and 907 were streaky at 500 Hz.

3. With 9 channels processed and CSD matrices using 64 FFTs of length 256, there were no spots in any of the images at 100 or 200 Hz. At 300 Hz, image 907 contained very small surface spots. At 400 Hz, that image contained very small nonsurface spots. Images 906 and 907 were streaky at 500 Hz.

4. In the group of images with 15 channels processed and CSD matrices using 16 FFTs of length 1024, all of the images contained small surface spots at 100 Hz. At 200 Hz, images 906 and 907 each contained a nonsurface spot. At 300 Hz, images 905 and 906 contained surface spots, and image 907 contained surface and nonsurface spots. At 400 Hz, images 906 and 907 contained nonsurface spots. Images 906 and 907 were very streaky at 500 Hz.

5. In the group of images with 15 channels processed and CSD matrices using 32 FFTs of length 512, all of the images contained small surface spots at 100 Hz. At 200 Hz, images 906 and 907 contained nonsurface spots. Image 907 contained a surface spot at 300 Hz. At 400 Hz, both images 906 and 907 contained nonsurface spots. Images 906 and 907 were streaky at 500 Hz, and image 905 was mostly high energy.

6. In the group of images with 15 channels processed and CSD matrices using 64 FFTs of length 256, small surface spots were present in all images at 100 Hz. At 200 Hz, images 906 and 907 contained nonsurface spots. At 300 Hz, image 905 was primarily high energy and image 907 contained a nonsurface spot. At 400 Hz, image 906 contained a small nonsurface spot. And finally, at 500 Hz, image 906 contained small nonsurface spots. None of the images appeared streaky at this frequency.

DISCUSSION

Several interesting patterns can be discerned from the observations made in the preceding section. The first, which was mentioned briefly in the "observations" section, is that all of the images did contain a large area of high energy, usually in the upper left corner but on occasion in the upper right corner. This image was sometimes singular and very distinct, surrounded by areas of significantly lower energy. At other times, the high-energy area was mirrored on the opposite side, occasionally by an area of equal energy intensity, but most often by an area of lower energy. The variation between images was great, but the important finding was that the mass of high energy exists on a consistent basis.

Secondly, small spots located so that the entire area of high energy is visible in the image appear much more often at higher frequencies. Small spots close to the surface were far more common than spots located at least 2 centimeters into the chest.

The images made from the data of subjects in "good" health were far more consistent than those from subjects who smoked or had heart problems. This consistency is more noticeable at frequencies of 300 Hz or below. In most cases, the images at frequencies within this range did not have localized spots, and most of the spots that did exist were located near the surface.

A third pattern concerns a comparison of images with 9 channels processed and those with 15 channels processed. The images in the latter category consistently had more areas of

higher energy. While there were images in the first category that were mostly or entirely high energy, the second category had more localized spots, especially those near the surface. This is especially noticeable in the final group of images obtained from the single subject with a heart condition unrelated to arterial blockage. At 100 Hz, this subject's images with nine channels processed showed no localized spots. With 15 channels processed, however, several small spots appeared near the chest surface in each of the images.

The multiple combinations of FFT length and number of FFTs revealed another pattern. Aliasing, which is identified by a "streaking" of the image, was far more noticeable in those images processed with 16 FFTs of length 1024 than with 32 and 64 FFTs. In 6 of the 8 groupings,* the number of images identified as "very streaky" declines as the number of FFTs increased. In the two groupings where this did not happen, the number of images that appeared streaky remained the same. In no case did the number of images classified as "streaky" increase with the number of FFTs used.

A similar pattern may be found in the presence of streaking at 400 Hz. In 4 of the 8 cases, the number of streaky images at 400 Hz dropped when the image used 64 FFTs instead of 16. In three of the other four groupings, the number of streaky images remained constant. In only one case did the number increase, from one streaky image with 16 FFTs to none with 32 FFTs, then back up to one streaky image with 64 FFTs. This occurred in the group of subjects with previous arterial blockage where 15 channels were processed when producing the image.

CONCLUSIONS

The conclusions that can be drawn from the data provided in this memorandum are not numerous. The observations indicate that there are several advantages to processing the data using 64 FFTs in the CSD matrix. The greater correlation among the images of subjects in good health indicates that these images may be of most use in determining the spots of energy that are produced by normal heart sounds.

* The eight groupings comprise the original four groupings, each divided into 15 channels processed and 9 channels processed.

APPENDIX A

IMAGES FOR IMAGE SET 1

The image set in this appendix comprises images from 25 data sets. Each data set consists of approximately 16,000 data points, selected from a 60-second sample. The points were taken exclusively from the diastolic phase of the heartbeat. An EKG was used to definitively identify the S1 heart sound. From that, the S2 heart sound was located and data points were taken from the interval between the S2 sound and the following S1 sound.

Each of the 25 data sets was processed using three different combinations of FFT length and number of FFTs performed: 16 FFTs with length of 1024 points, 32 FFTs with length of 512 points, and 64 FFTs with length of 256 points, creating a total of 75 processed data sets.

For image set 1, the following input values were used in creating the beamformed images. The wave speed through tissue at 100 Hz was set at 4 m/s. The wave speed at 1000 Hz was set at 12 m/s. These values were selected based on given wave speed values of 3.75 m/s and 13 m/s, respectively, and should be experimented with in future image sets. The RVDR enhancement value was 6.0. This value was chosen while experimenting with one of the above data sets. All 15 channels were processed.

Filename: 901_16_1024.csd
 Runname: 901_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.042
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 4.351
 RVDR Surface Maximum Location
 X (cm): -4.184 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.859
 CFB Surface Maximum Location
 X (cm): 3.367 Y (cm): 2.929
 RVDR Surface Normalization (dB): 0.8271
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.034
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 8.182
 RVDR Surface Normalization (dB): 0.8692
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

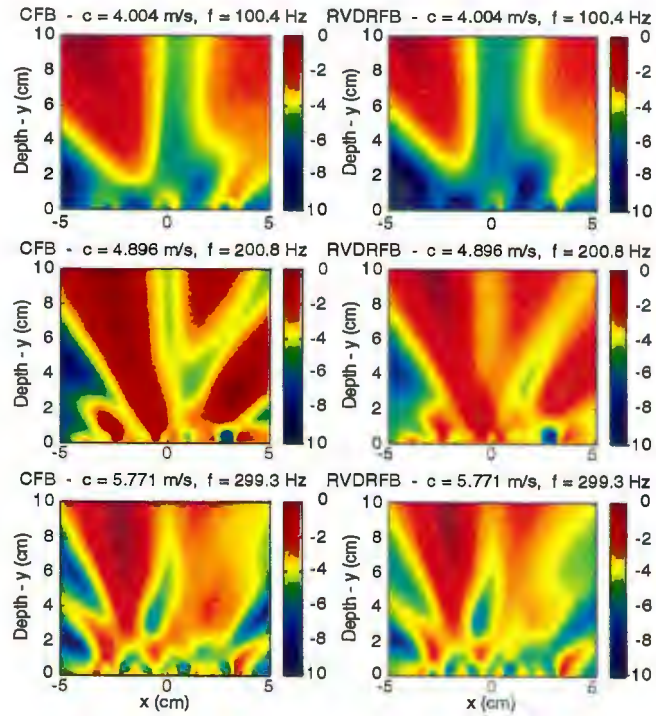


Figure A-1. Image of Data Set 901: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 901_16_1024.csd
 Runname: 901_16_1024
 DAWG Data
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.034
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 8.182
 RVDR Surface Normalization (dB): 0.8692
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.17
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 0.7129
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.125
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 8.384
 RVDR Surface Normalization (dB): 0.6274
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

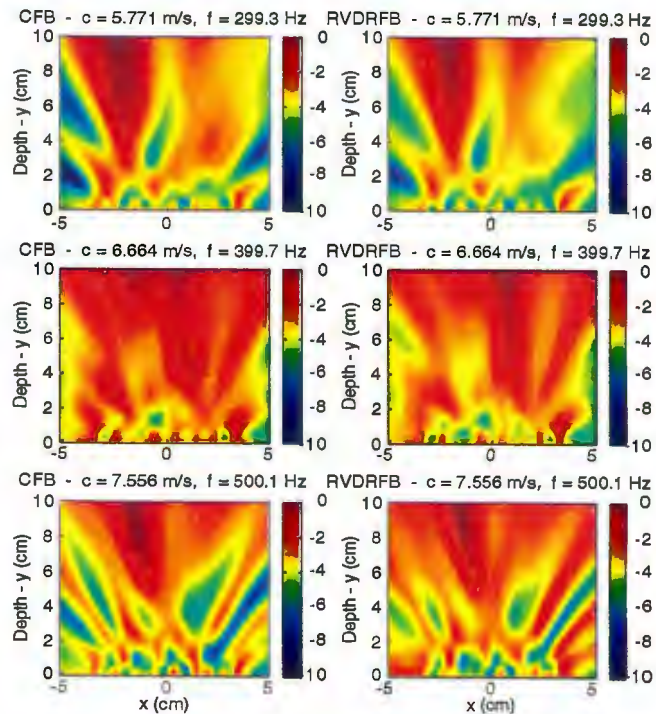


Figure A-2. Image of Data Set 901: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 901_32_512.csd
 Runname: 901_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.109
 CFB Surface Maximum Location
 X (cm): -4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 4.631
 RVDR Surface Maximum Location
 X (cm): -4.164 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.611
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 1.982
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.482
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.92
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

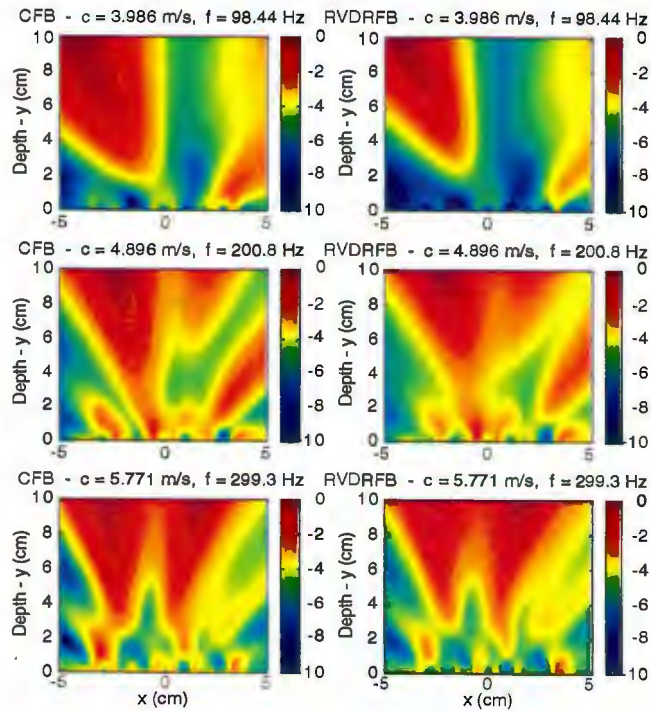


Figure A-3. Image of Data Set 901: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 901_32_512.csd
 Runname: 901_32_512
 DAWG Data
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.482
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.92
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.92
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.569
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.664
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.21
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1

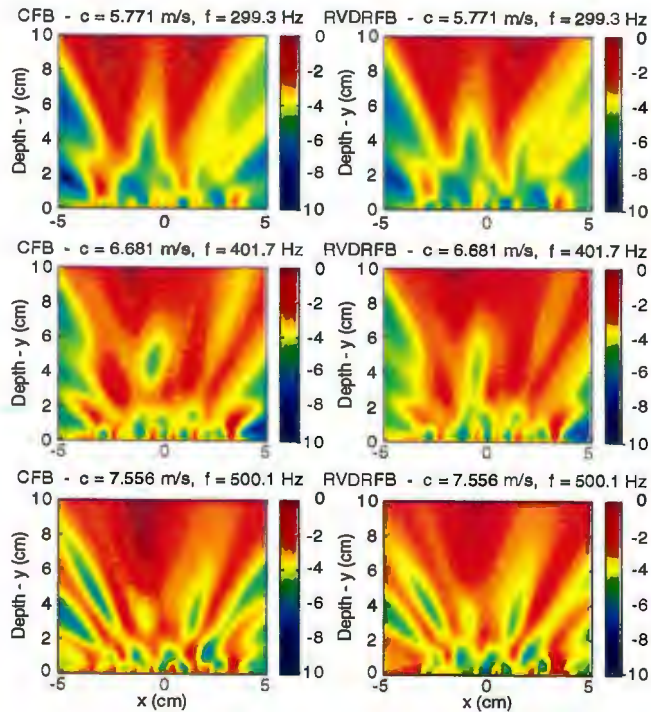


Figure A-4. Image of Data Set 901: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 901_64_256.csd
 Runname: 901_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.853
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 3.939
 RVDR Surface Maximum Location
 X (cm): -3.98 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.671
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 2.001
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.412
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 1.721
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

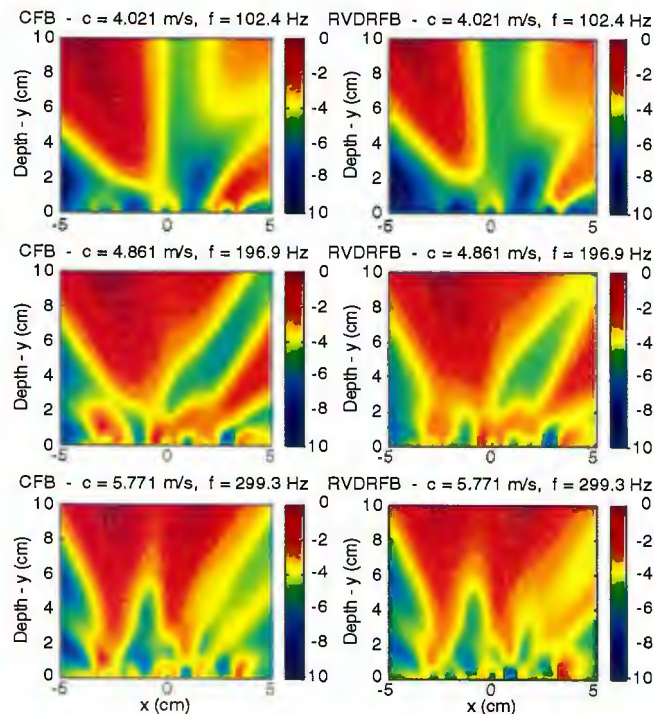


Figure A-5. Image of Data Set 901: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 901_64_256.csd
 Runname: 901_64_256
 DAWG Data
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.412
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 1.721
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.474
 CFB Surface Maximum Location
 X (cm): 0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.54
 RVDR Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.666
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.384
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1

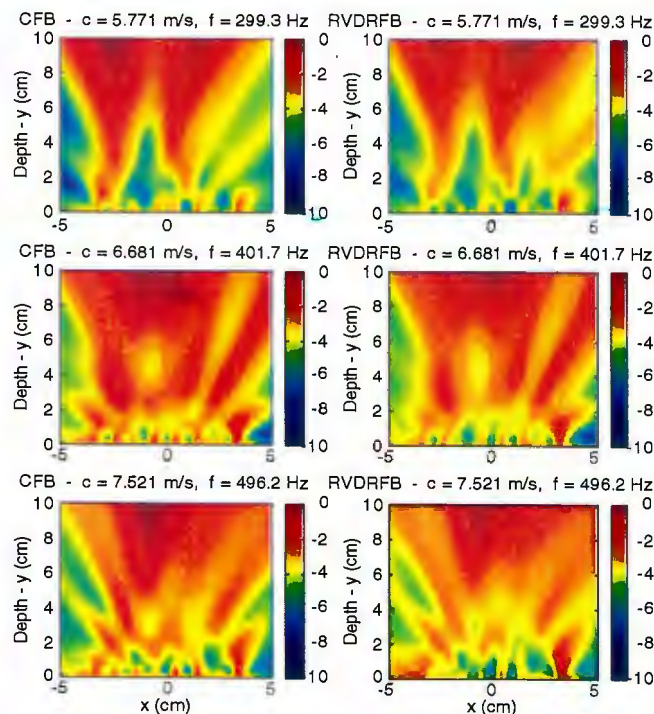


Figure A-6. Image of Data Set 901: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 902_16_1024.csd

Runname: 902_16_1024

Diastolic Phase

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 6.131

CFB Surface Maximum Location

X (cm): -1.327 Y (cm): 10

RVDR Surface Normalization (dB): 3.903

RVDR Surface Maximum Location

X (cm): 2.347 Y (cm): 10

Frequency 200 Hz

CFB Surface Normalization (dB): 4.561

CFB Surface Maximum Location

X (cm): -1.939 Y (cm): 10

RVDR Surface Normalization (dB): 3.673

RVDR Surface Maximum Location

X (cm): -1.939 Y (cm): 10

Frequency 300 Hz

CFB Surface Normalization (dB): 6.549

CFB Surface Maximum Location

X (cm): -1.327 Y (cm): 10

RVDR Surface Normalization (dB): 1.247

RVDR Surface Maximum Location

X (cm): -1.327 Y (cm): 10

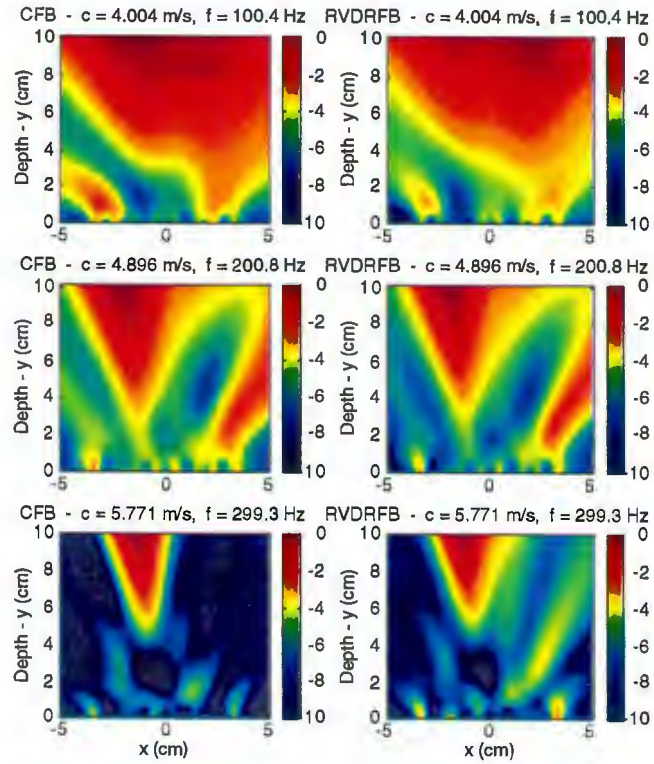


Figure A-7. Image of Data Set 902: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 902_16_1024.csd

Runname: 902_16_1024

DAWG Data

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 6.549

CFB Surface Maximum Location

X (cm): -1.327 Y (cm): 10

RVDR Surface Normalization (dB): 1.247

RVDR Surface Maximum Location

X (cm): -1.327 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 3.854

CFB Surface Maximum Location

X (cm): -0.5102 Y (cm): 10

RVDR Surface Normalization (dB): 0.1545

RVDR Surface Maximum Location

X (cm): -0.3061 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 3.841

CFB Surface Maximum Location

X (cm): -0.102 Y (cm): 10

RVDR Surface Normalization (dB): 0.6303

RVDR Surface Maximum Location

X (cm): 3.367 Y (cm): 0.1

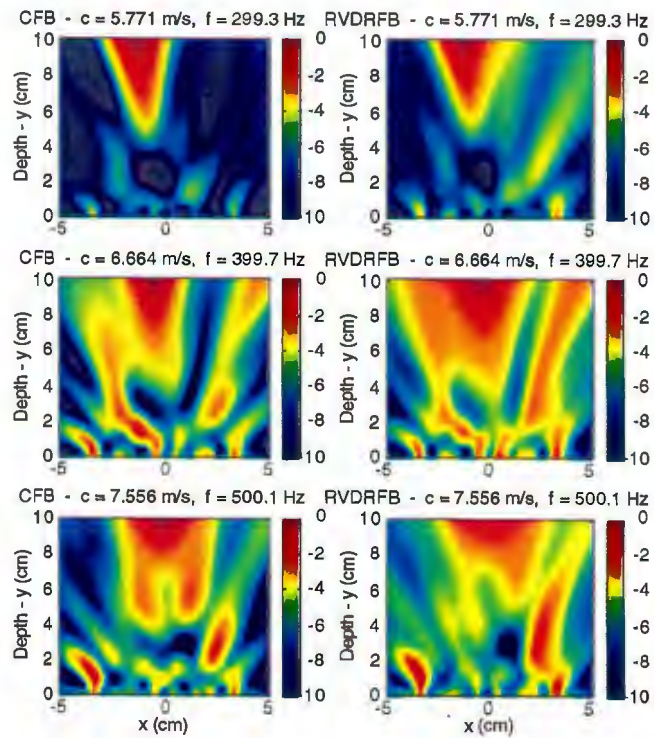


Figure A-8. Image of Data Set 902: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 902_32_512.csd
 Runname: 902_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.864
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 4.802
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.263
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.961
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 5.997
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.665
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

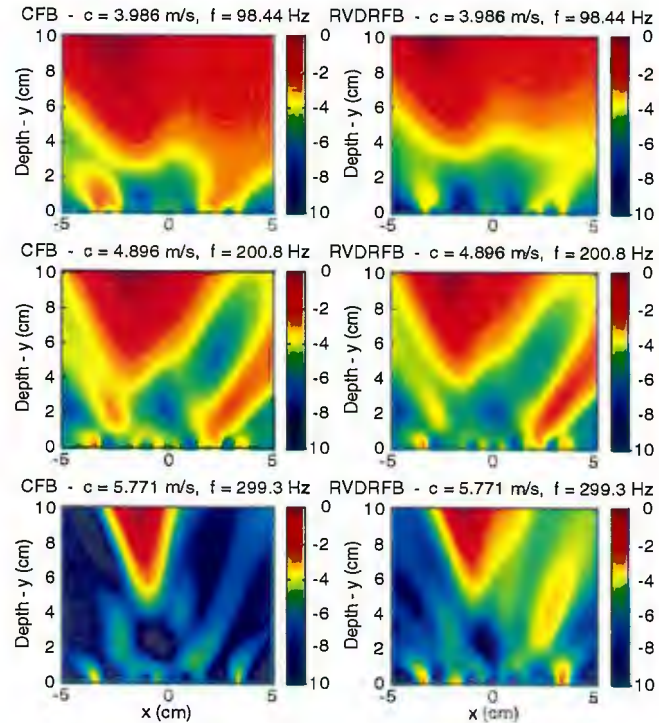


Figure A-9. Image of Data Set 902: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 902_32_512.csd
 Runname: 902_32_512
 DAWG Data
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 5.997
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.665
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.72
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.5041
 RVDR Surface Normalization (dB): 0.7547
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.1

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.972
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 1.11
 RVDR Surface Normalization (dB): 0.6905
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 1.11

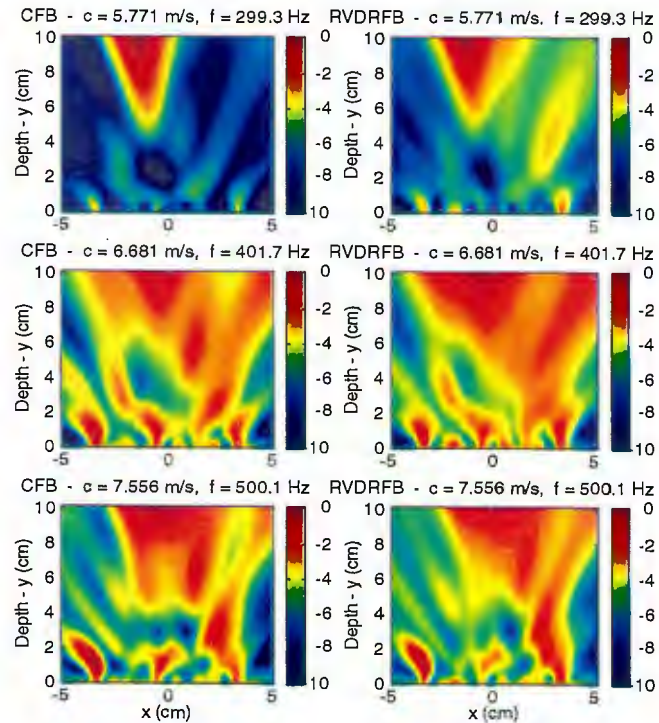


Figure A-10. Image for Data Set 902: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 902_64_256.csd
 Runname: 902_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.813
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 4.126
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.944
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 3
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 5.408
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.189
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

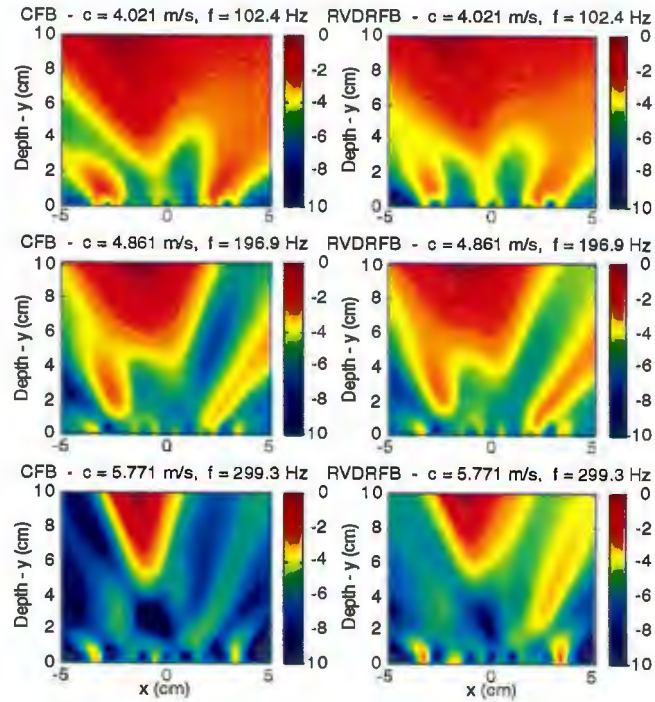


Figure A-11. Image for Data Set 902: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 902_64_256.csd
 Runname: 902_64_256
 DAWG Data
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 5.408
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.189
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.658
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.302
 RVDR Surface Normalization (dB): 0.6613
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.229
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6633
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

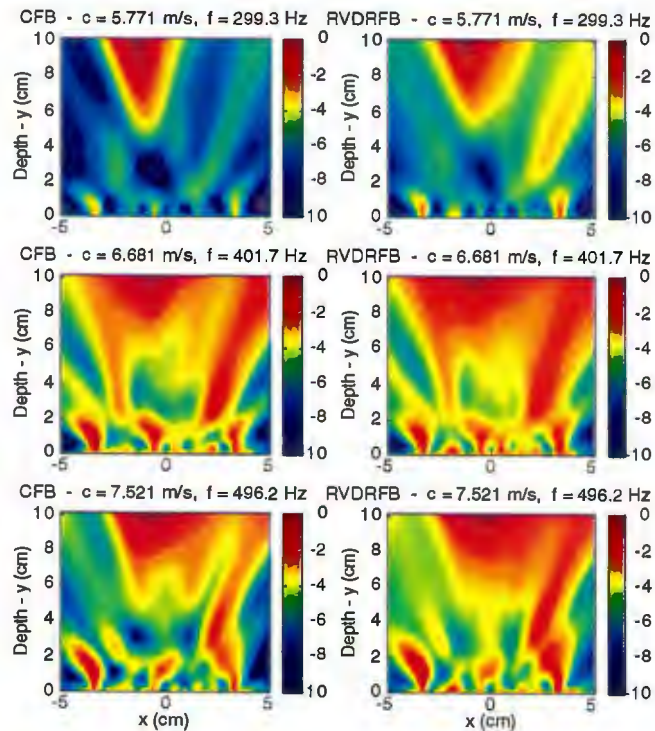


Figure A-12. Image of Data Set 902: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 903_16_1204.csd
 Runname: 903_16_1204
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.355
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 6.13
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.449
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 3.217
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.726
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 1.398
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

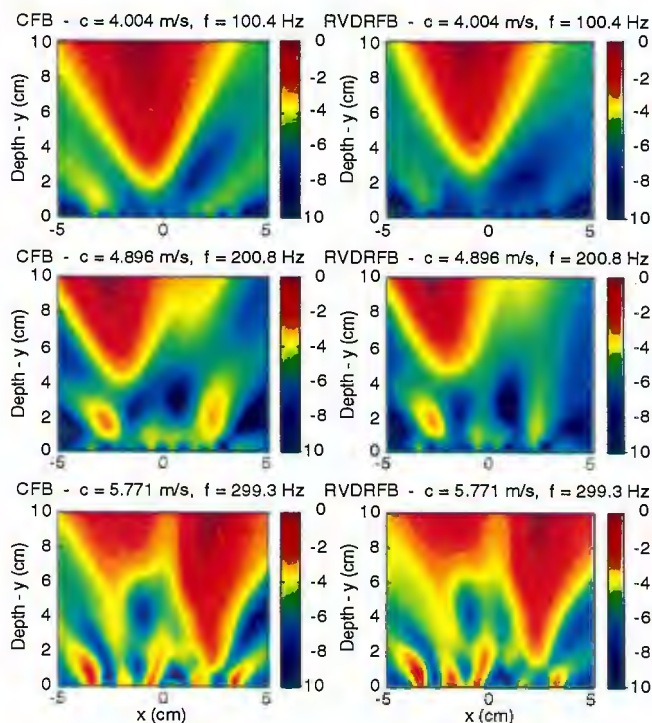


Figure A-13. Image for Data Set 903: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 903_16_1204.csd
 Runname: 903_16_1204
 DAWG Data
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.726
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 1.398
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.102
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.48
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.177
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.45
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

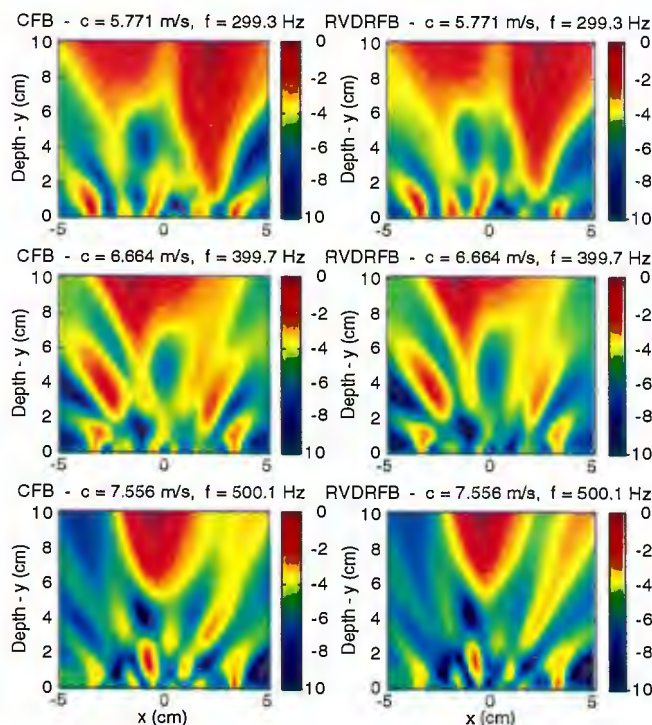


Figure A-14. Image for Data Set 903: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 903_32_512.csd
 Runname: 903_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.923
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 4.723
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.752
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 3.117
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.83
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.496
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

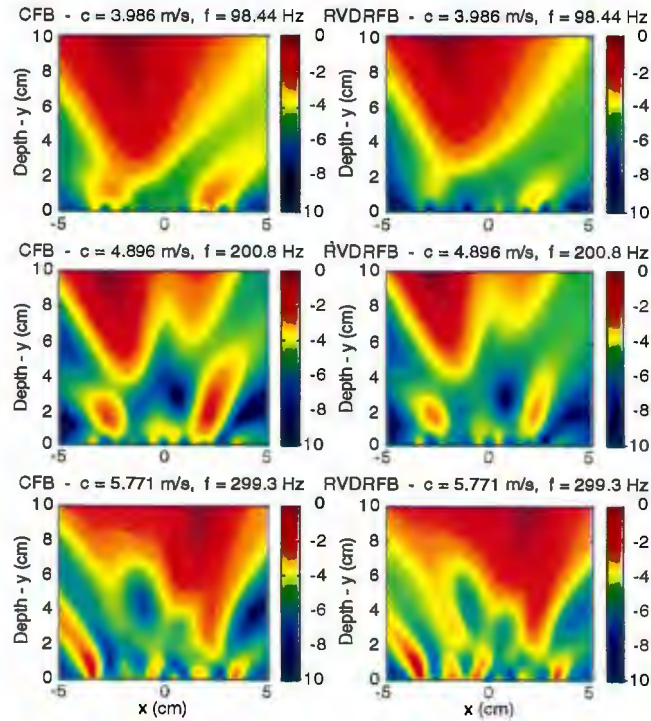


Figure A-15. Image for Data Set 903: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 903_32_512.csd
 Runname: 903_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.63
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.496
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.001
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 1.536
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.665
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.145
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

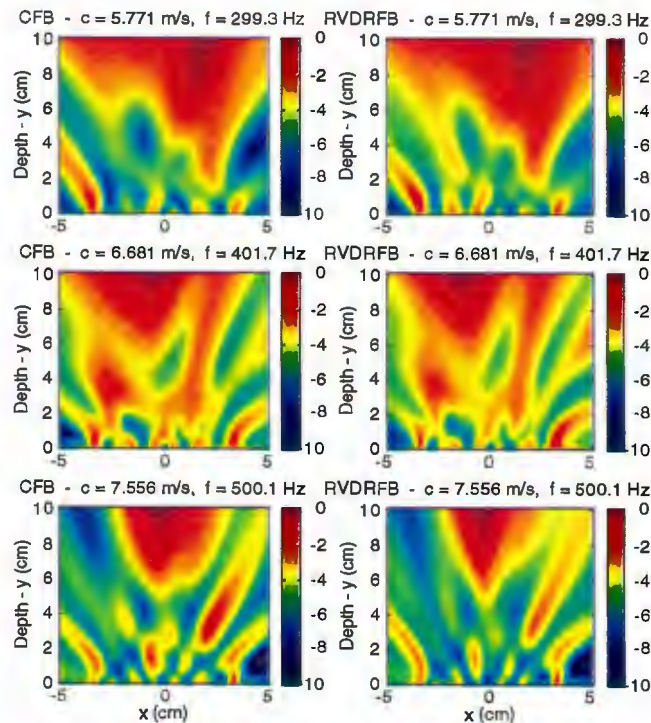


Figure A-16. Image for Data Set 903: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 903_64_256.csd
 Runname: 903_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.763
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 4.714
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.103
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 3.668
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.827
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.494
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

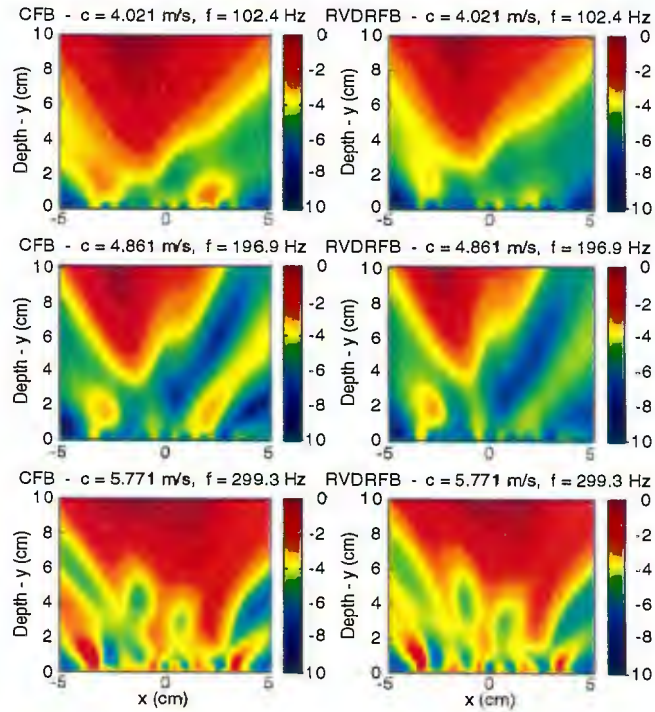


Figure A-17. Image for Data Set 903: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 903_64_256.csd
 Runname: 903_64_256
 DAWG Data
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.827
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.494
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.963
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.743
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.785
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.494
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

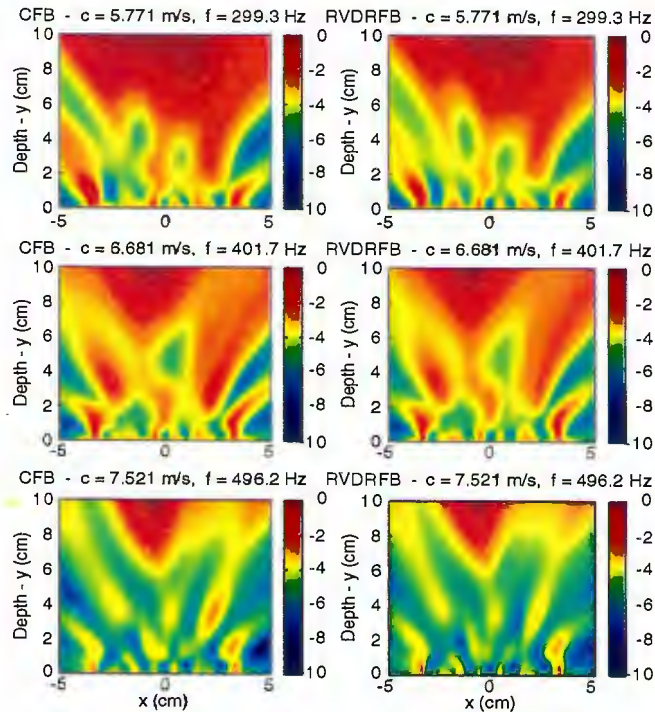


Figure A-18. Image for Data Set 903: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 904_16_1024.csd
 Runname: 904_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.417
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 10
 RVDR Surface Normalization (dB): 5.156
 RVDR Surface Maximum Location
 X (cm): -3.571 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.006
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.588
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.598
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.496
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

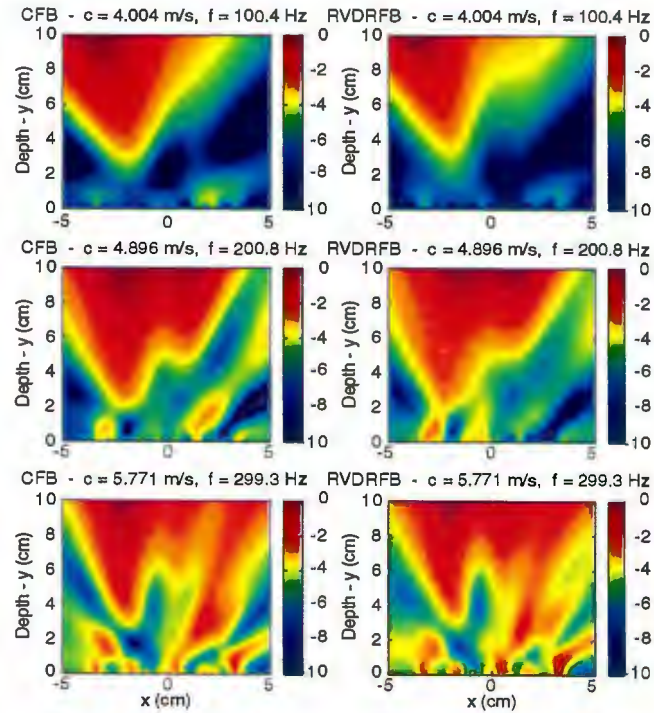


Figure A-19. Image for Data Set 904: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 904_16_1024.csd
 Runname: 904_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.598
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.496
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.531
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 0.7427
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.915
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 0.3721
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

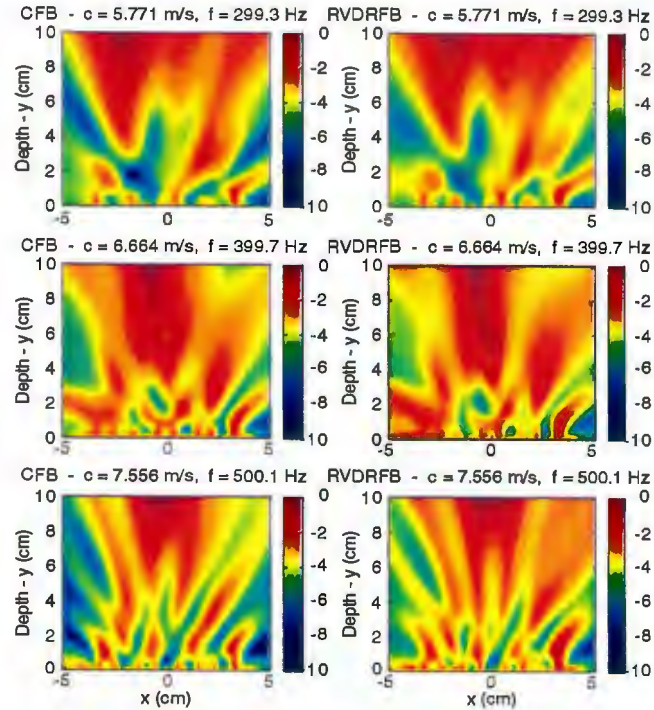


Figure A-20. Image for Data Set 904: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 904_32_512.csd

Runname: 904_32_512

Diastolic Phase

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 32

Number of Points per FFT: 512

Frequency Bin Resolution (Hz): 3.938

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 6.068

CFB Surface Maximum Location

X (cm): -1.735 Y (cm): 10

RVDR Surface Normalization (dB): 4.012

RVDR Surface Maximum Location

X (cm): -1.939 Y (cm): 10

Frequency 200 Hz

CFB Surface Normalization (dB): 5.024

CFB Surface Maximum Location

X (cm): -1.735 Y (cm): 10

RVDR Surface Normalization (dB): 2.926

RVDR Surface Maximum Location

X (cm): -1.531 Y (cm): 10

Frequency 300 Hz

CFB Surface Normalization (dB): 3.354

CFB Surface Maximum Location

X (cm): -1.735 Y (cm): 10

RVDR Surface Normalization (dB): 1.983

RVDR Surface Maximum Location

X (cm): -1.735 Y (cm): 10

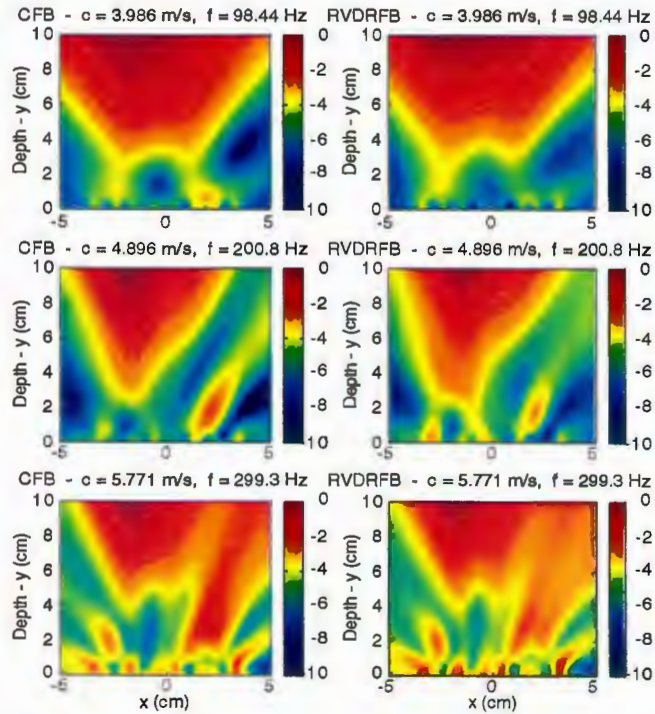


Figure A-21. Image for Data Set 904: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 904_32_512.csd

Runname: 904_32_512

Diastolic Phase

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 32

Number of Points per FFT: 512

Frequency Bin Resolution (Hz): 3.938

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 3.354

CFB Surface Maximum Location

X (cm): -1.735 Y (cm): 10

RVDR Surface Normalization (dB): 1.983

RVDR Surface Maximum Location

X (cm): -1.735 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 3.058

CFB Surface Maximum Location

X (cm): -0.7143 Y (cm): 10

RVDR Surface Normalization (dB): 1.611

RVDR Surface Maximum Location

X (cm): -0.5102 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 2.57

CFB Surface Maximum Location

X (cm): -0.102 Y (cm): 10

RVDR Surface Normalization (dB): 0.7163

RVDR Surface Maximum Location

X (cm): 3.367 Y (cm): 0.1

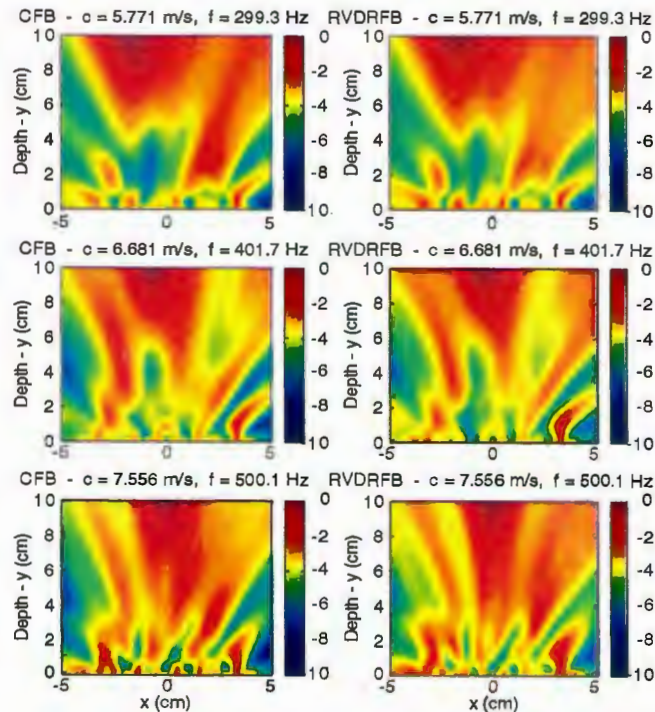


Figure A-22. Image for Data Set 904: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 904_64_256.csd
 Runname: 904_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.614
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 4.1
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.808
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.87
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.854
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.575
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

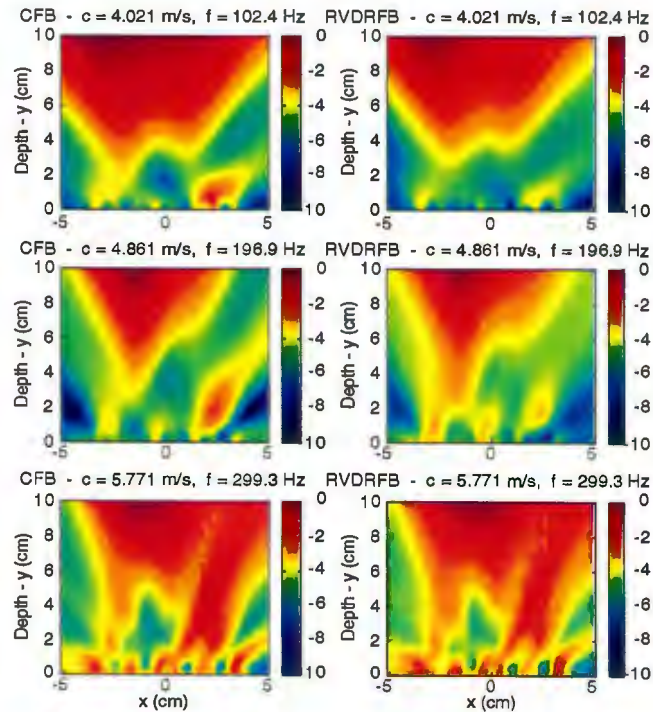


Figure A-23. Image for Data Set 904: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 904_64_256.csd
 Runname: 904_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.854
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.575
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.572
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.448
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.989
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.887
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

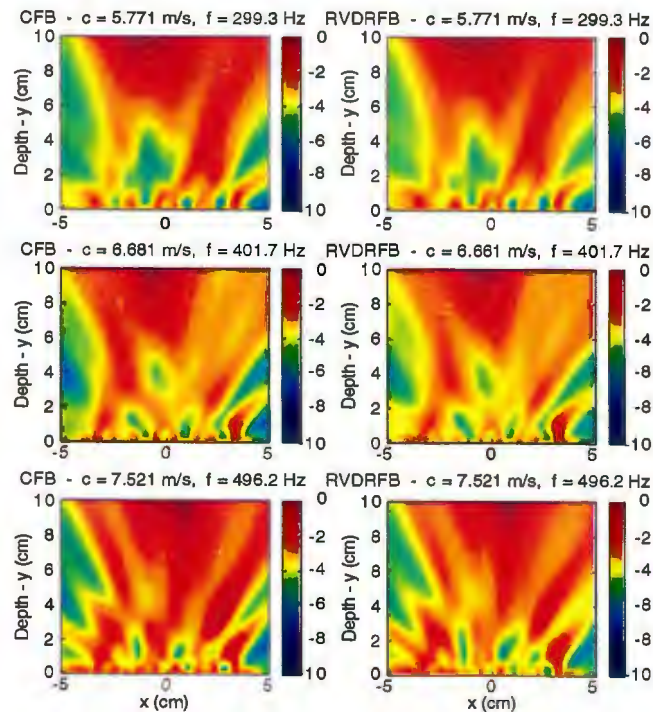


Figure A-24. Image for Data Set 904: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 905_16_1024.csd
Runname: 905_16_1024

Diastolic Phase
Spreading Parameter = 1
15 Channels Processed
Z Value of Cut (cm): 0
Wave Speed Interpolation
4 m/s at 100 Hz
12 m/s at 1000 Hz
Number of Temporal FFTs: 16
Number of Points per FFT: 1024
Frequency Bin Resolution (Hz): 1.969
RVDR Enhancement (linear): 6

Frequency 100 Hz
CFB Surface Normalization (dB): 7.002
CFB Surface Maximum Location
X (cm): -1.939 Y (cm): 10
RVDR Surface Normalization (dB): 4.029
RVDR Surface Maximum Location
X (cm): -3.571 Y (cm): 10

Frequency 200 Hz
CFB Surface Normalization (dB): 3.893
CFB Surface Maximum Location
X (cm): -0.7143 Y (cm): 10
RVDR Surface Normalization (dB): 0.6038
RVDR Surface Maximum Location
X (cm): -1.939 Y (cm): 10

Frequency 300 Hz
CFB Surface Normalization (dB): 3.749
CFB Surface Maximum Location
X (cm): -1.327 Y (cm): 10
RVDR Surface Normalization (dB): 1.509
RVDR Surface Maximum Location
X (cm): -1.327 Y (cm): 10

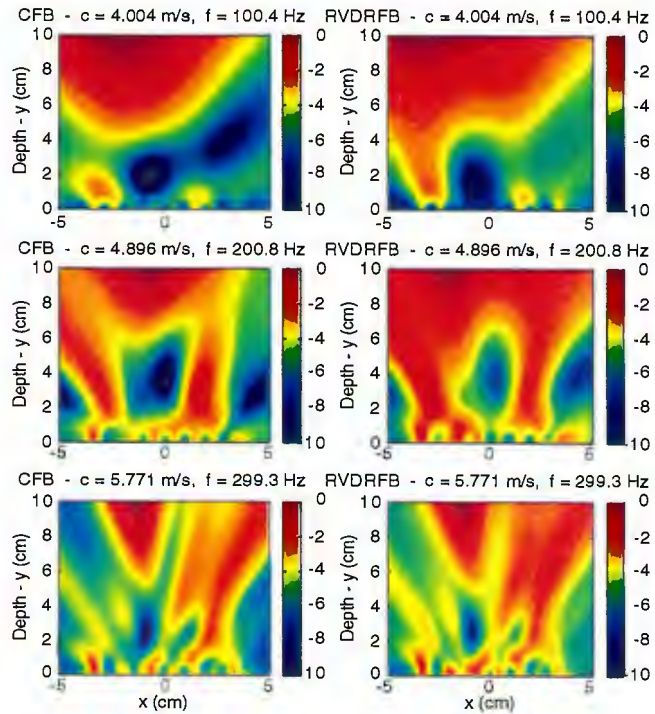


Figure A-25. Image of Data Set 905: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 905_16_1024.csd
Runname: 905_16_1024

Diastolic Phase
Spreading Parameter = 1
15 Channels Processed
Z Value of Cut (cm): 0
Wave Speed Interpolation
4 m/s at 100 Hz
12 m/s at 1000 Hz
Number of Temporal FFTs: 16
Number of Points per FFT: 1024
Frequency Bin Resolution (Hz): 1.969
RVDR Enhancement (linear): 6

Frequency 300 Hz
CFB Surface Normalization (dB): 3.749
CFB Surface Maximum Location
X (cm): -1.327 Y (cm): 10
RVDR Surface Normalization (dB): 1.509
RVDR Surface Maximum Location
X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
CFB Surface Normalization (dB): 1.932
CFB Surface Maximum Location
X (cm): -0.7143 Y (cm): 10
RVDR Surface Normalization (dB): 0.07308
RVDR Surface Maximum Location
X (cm): -0.7143 Y (cm): 10

Frequency 500 Hz
CFB Surface Normalization (dB): 1.917
CFB Surface Maximum Location
X (cm): -0.102 Y (cm): 10
RVDR Surface Normalization (dB): -0.0003202
RVDR Surface Maximum Location
X (cm): 1.327 Y (cm): 5.151

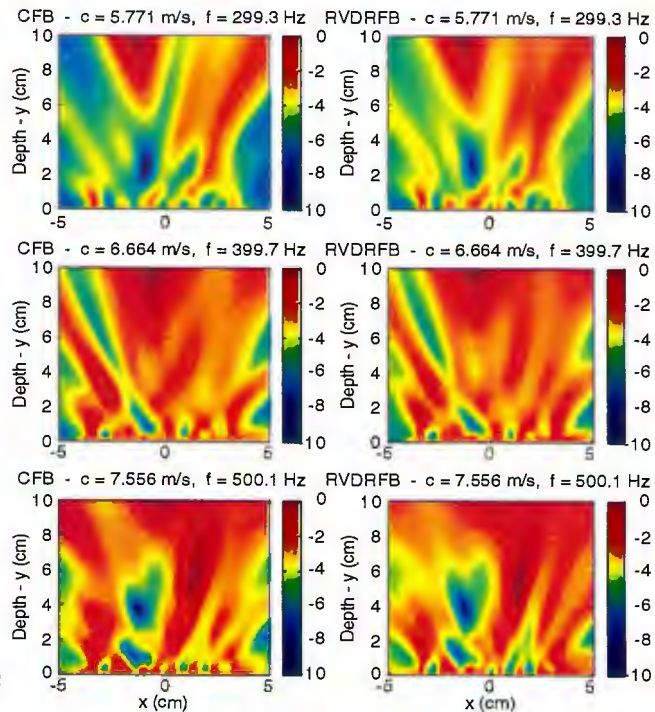


Figure A-26. Image of Data Set 905: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 905_32_512.csd
 Runname: 905_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.574
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 4.05
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.448
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.7479
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.639
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.8077
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

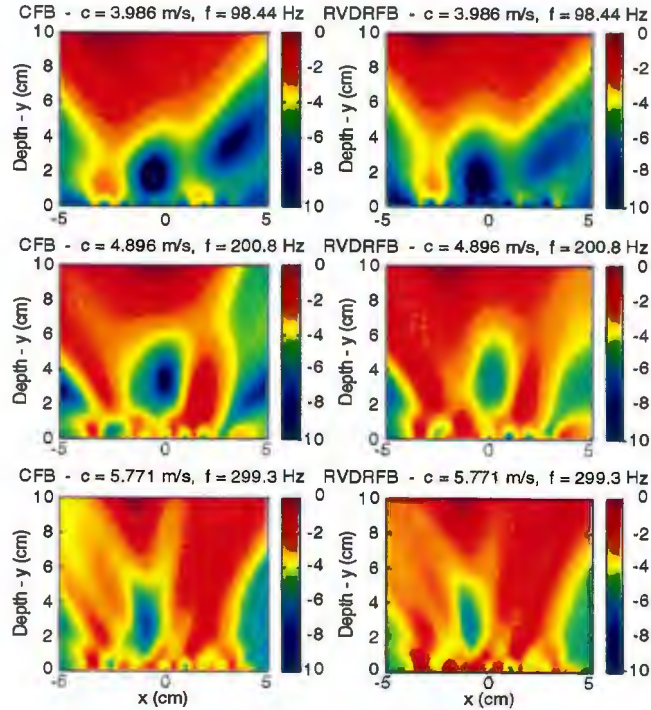


Figure A-27. Image of Data Set 905: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 905_32_512.csd
 Runname: 905_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.639
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.8077
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.75
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9837
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.898
 CFB Surface Maximum Location
 X (cm): -0.3081 Y (cm): 10
 RVDR Surface Normalization (dB): 0.3828
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.7061

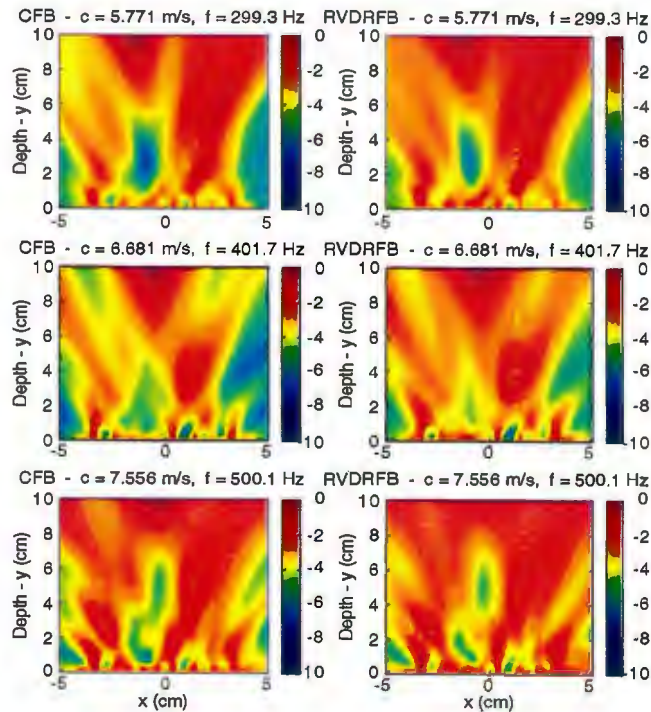


Figure A-28. Image of Data Set 905: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 905_64_256.csd
 Runname: 905_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.878
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.177
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 3.735
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.74
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 0.8728
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.133
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6213
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

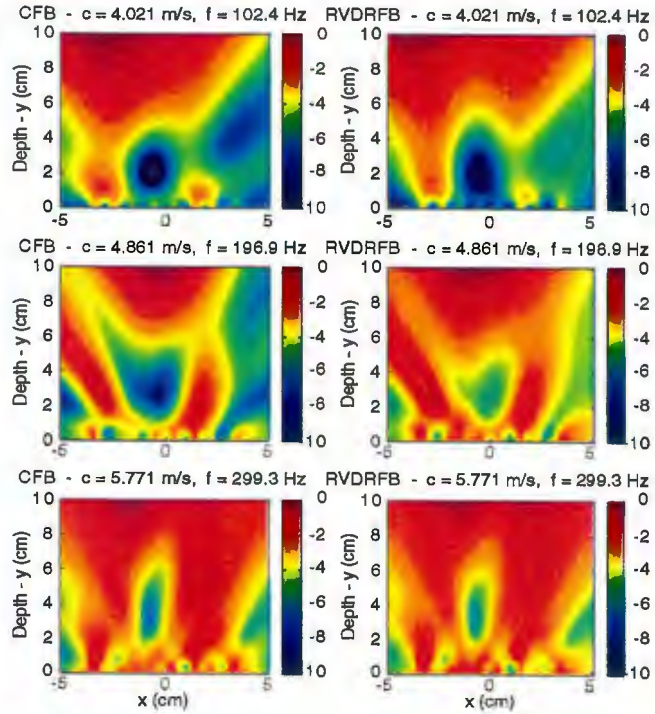


Figure A-29. Image of Data Set 905: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 905_64_256.csd
 Runname: 905_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.878
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.133
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6213
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.79
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.345
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.382
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9431
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

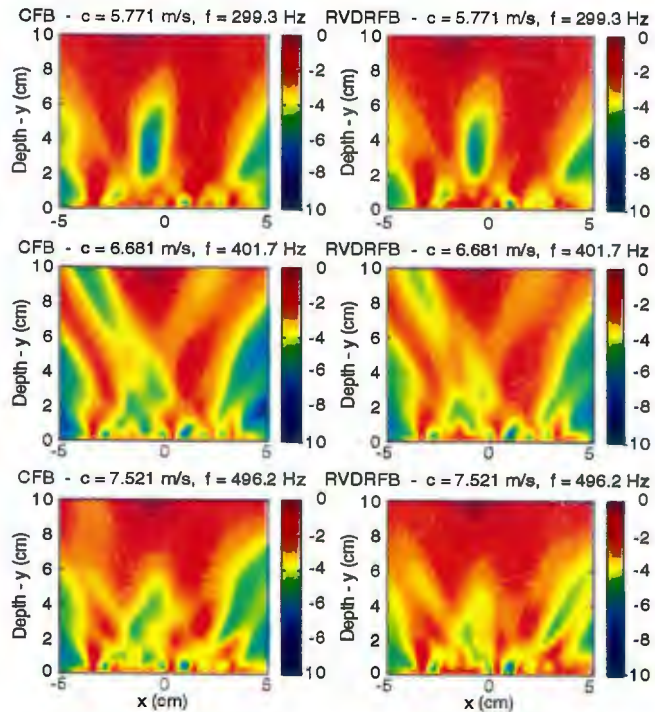


Figure A-30. Image of Data Set 905: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 906_16_1024.csd
 Runname: 906_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.509
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.808
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.7
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.385
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.966
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9906
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

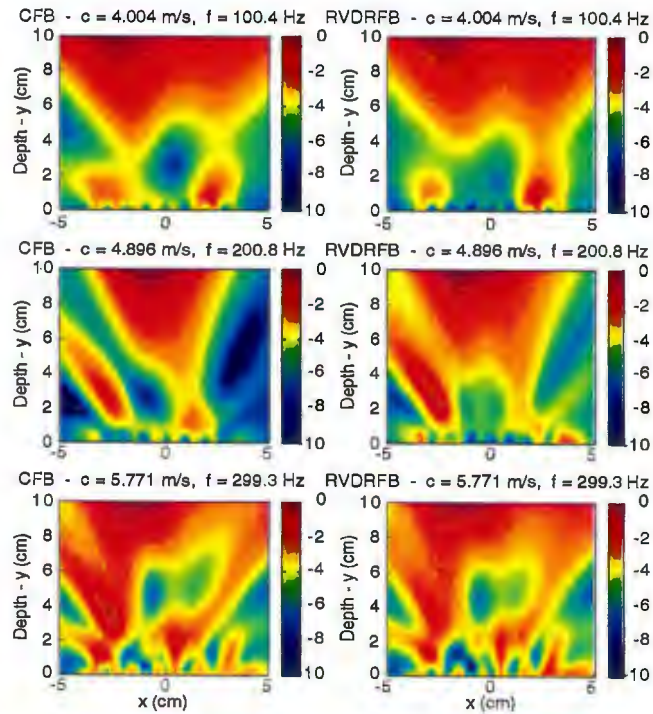


Figure A-31. Image of Data Set 906: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 906_16_1024.csd
 Runname: 906_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.966
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9906
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.785
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.771
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.201
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.262
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

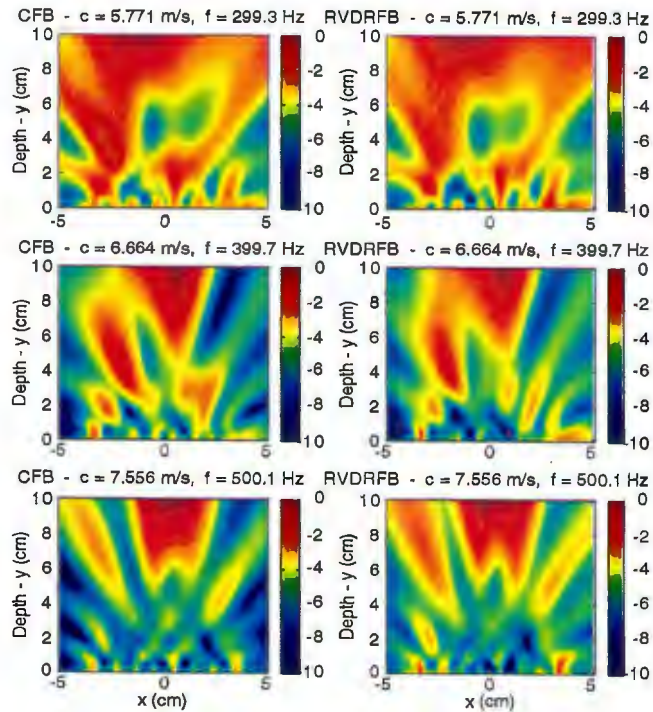


Figure A-32. Image of Data Set 906: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 906_32_512.csd
 Runname: 906_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.27
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 3.288
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.574
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.364
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.695
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6693
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

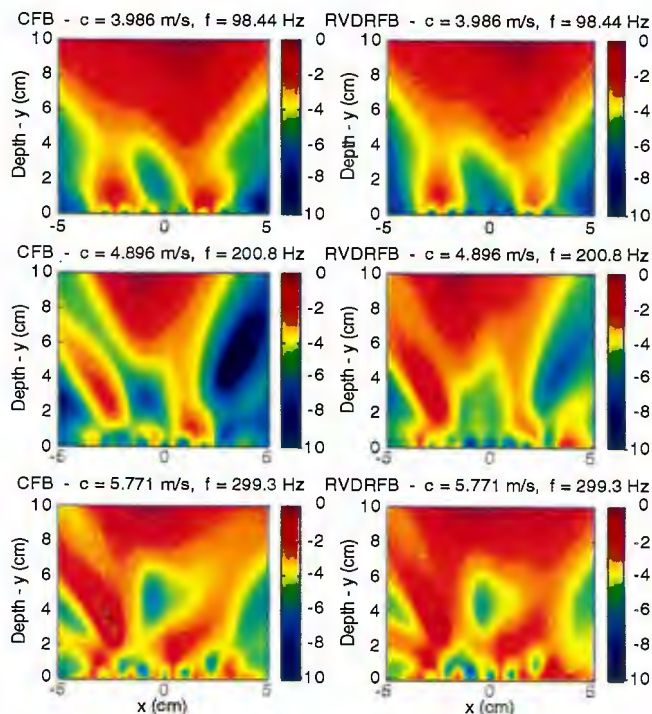


Figure A-33. Image of Data Set 906: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 906_32_512.csd
 Runname: 906_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.695
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6693
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.496
 CFB Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 1.786
 RVDR Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.314
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.181
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

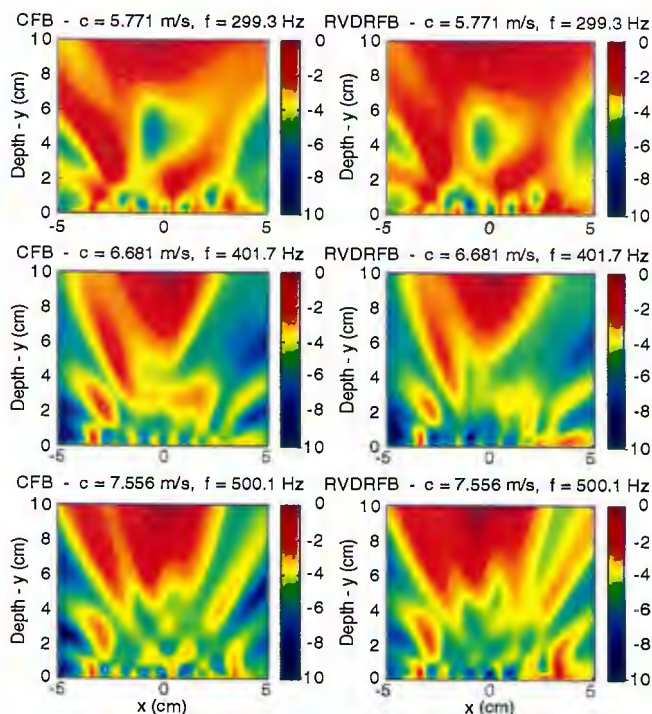


Figure A-34. Image of Data Set 906: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 906_64_256.csd
 Runname: 906_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.613
 CFB Surface Maximum Location
 X (cm): 0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 3.311
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.843
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.606
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.526
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.155
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

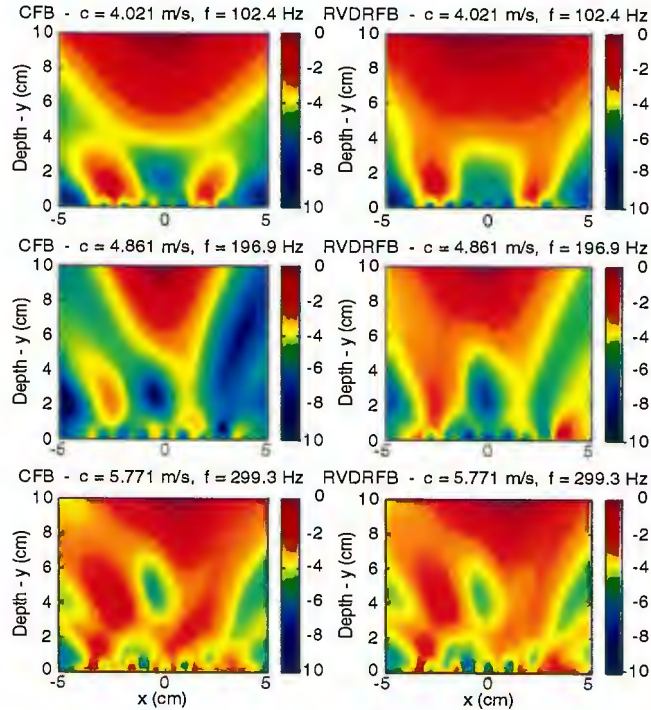


Figure A-35. Image of Data Set 906: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 906_64_256.csd
 Runname: 906_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.526
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.155
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.152
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.722
 RVDR Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.962
 CFB Surface Maximum Location
 X (cm): 0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6561
 RVDR Surface Maximum Location
 X (cm): 0.102 Y (cm): 10

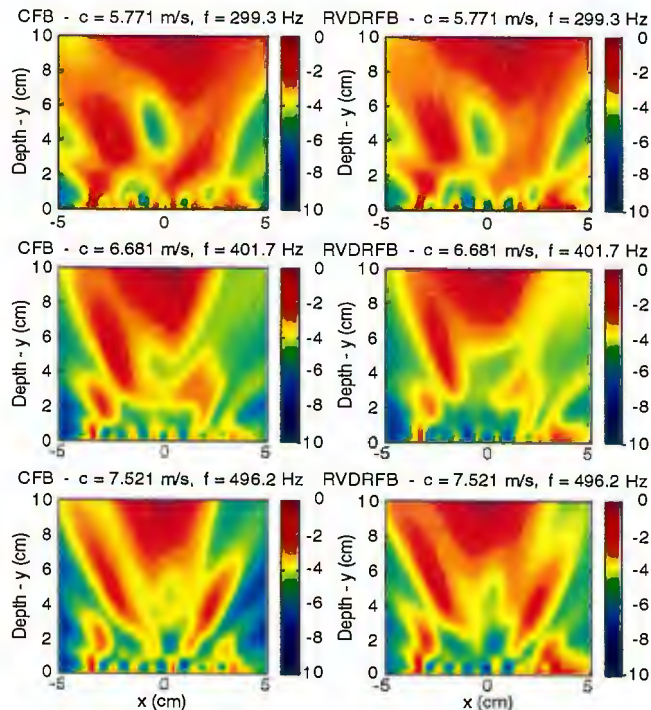


Figure A-36. Image of Data Set 906: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 907_16_1024.csd
 Runname: 907_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.202
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 3.508
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.281
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.632
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.704
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 0.08499
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 0.302

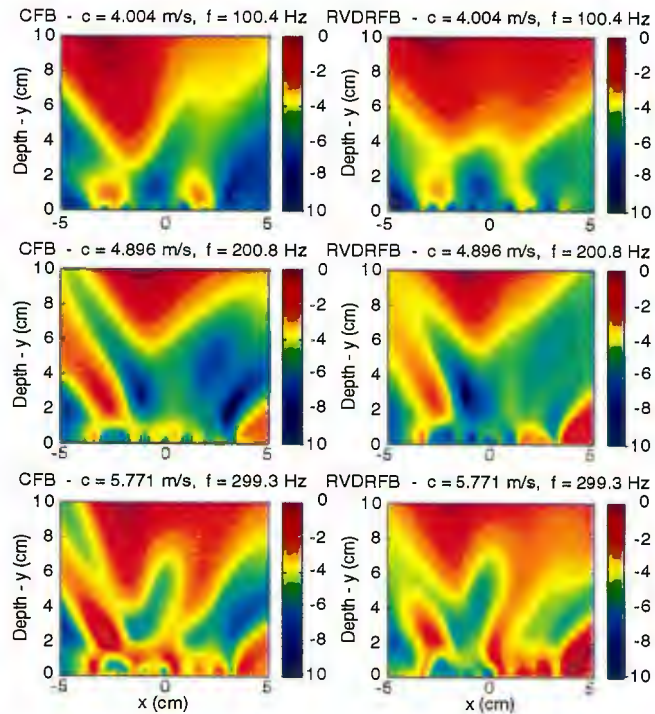


Figure A-37. Image of Data Set 907: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 907_16_1024.csd
 Runname: 907_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.704
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 0.08499
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 0.302

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.899
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.4397
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.965
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): -0.9405
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.1

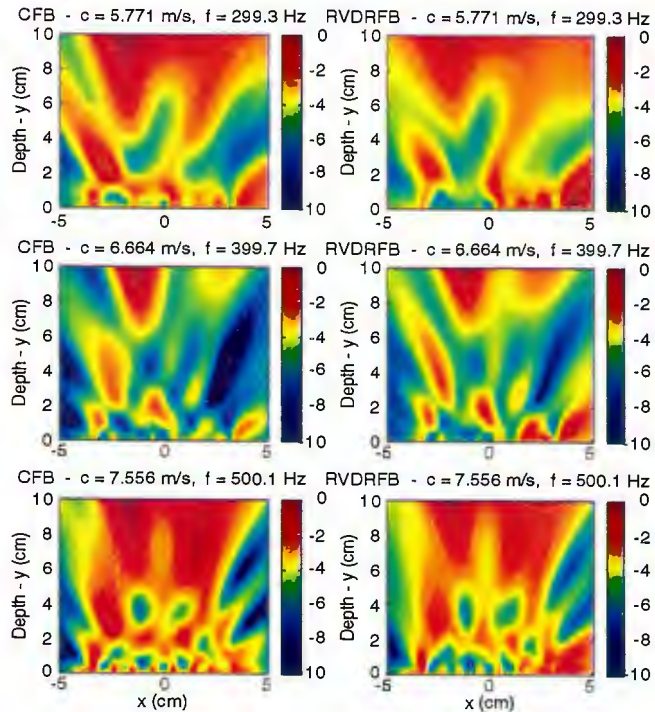


Figure A-38. Image of Data Set 907 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 907_32_512.csd
 Runname: 907_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.524
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 3.637
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.373
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.556
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.584
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.2848
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 0.5041

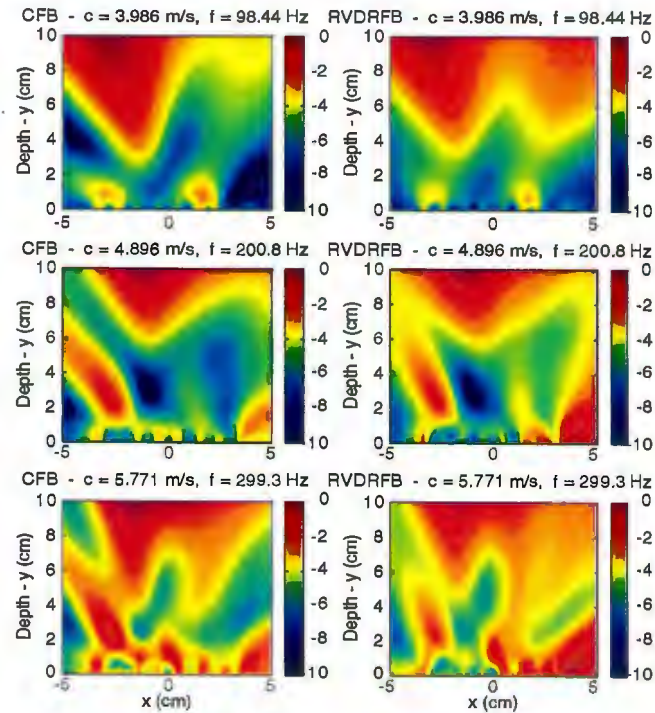


Figure A-39. Image of Data Set 907: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 907_32_512.csd
 Runname: 907_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.584
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.2848
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 0.5041

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.074
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6464
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 0.5041

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.794
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): -0.7599
 RVDR Surface Maximum Location
 X (cm): 3.571 Y (cm): 0.1

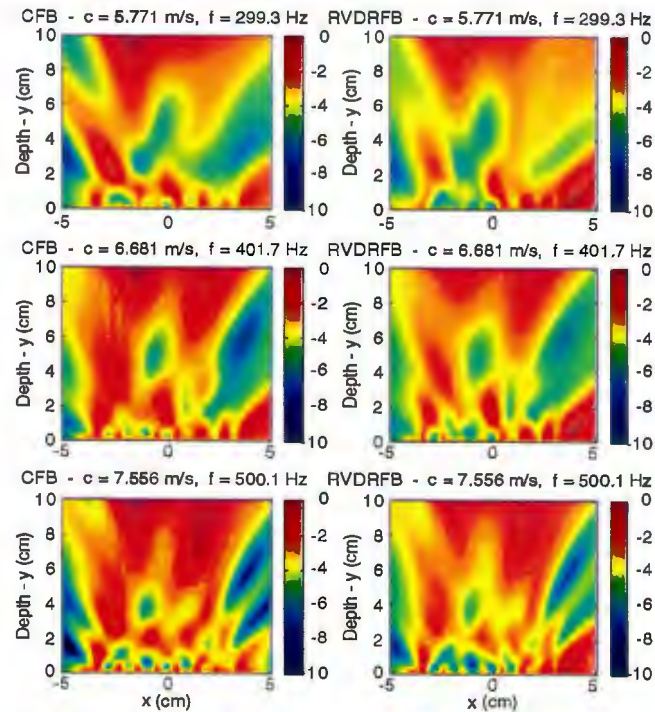


Figure A-40. Image for Data Set 907: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 907_64_256.csd
 Runname: 907_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.691
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 3.687
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.735
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.412
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.863
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.4309
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

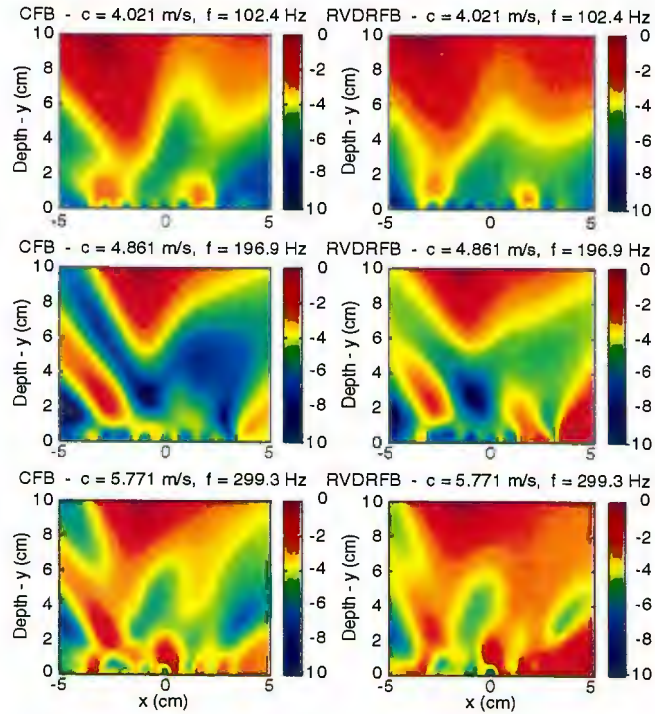


Figure A-41. Image of Data Set 907: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 907_64_256.csd
 Runname: 907_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.863
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.4309
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.743
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.5253
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 0.5041

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.999
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): -0.1175
 RVDR Surface Maximum Location
 X (cm): 3.571 Y (cm): 0.1

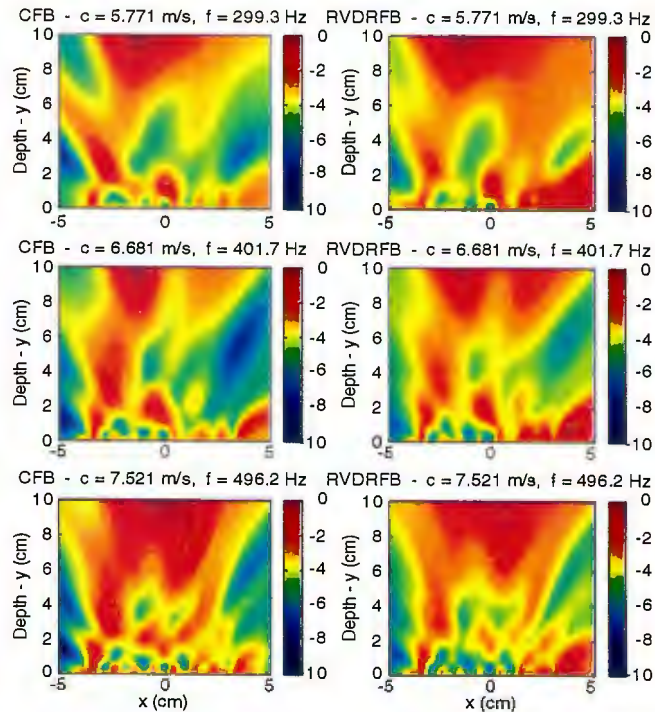


Figure A-42. Image of Data Set 907: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 908_16_1024.csd
 Runname: 908_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.18
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 10
 RVDR Surface Normalization (dB): 3.523
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.734
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 4.141
 RVDR Surface Normalization (dB): 0.9864
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 4.141

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.195
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.7259
 RVDR Surface Maximum Location
 X (cm): -3.387 Y (cm): 10

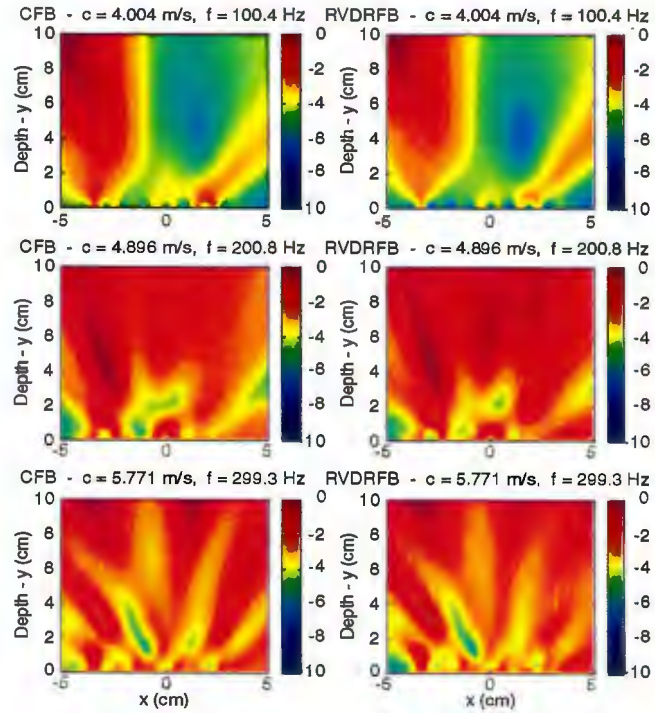


Figure A-43. Image of Data Set 908: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 908_16_1024.csd
 Runname: 908_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.195
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.7259
 RVDR Surface Maximum Location
 X (cm): -3.387 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.839
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.05689
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.211
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.4272
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

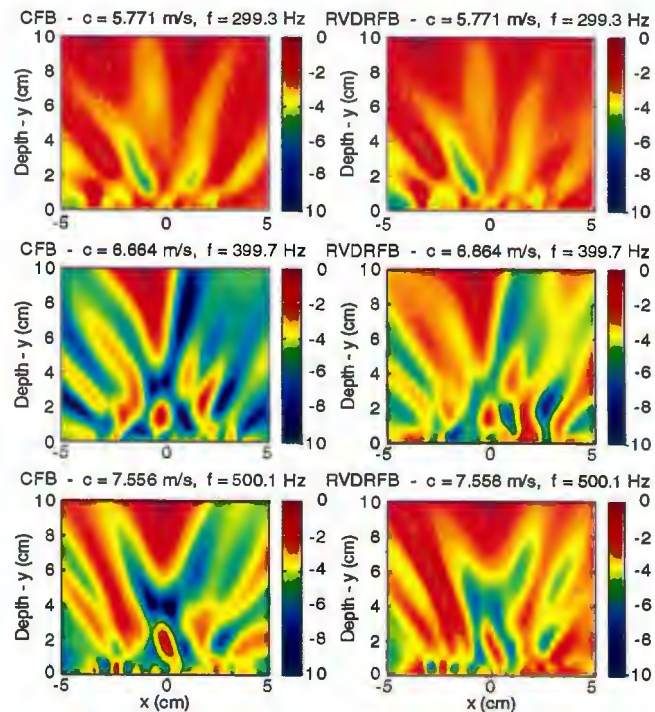


Figure A-44. Image for Data Set 908: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 908_32_512.csd
 Runname: 908_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.863
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 3.949
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.492
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.101
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.258
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 1.28
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

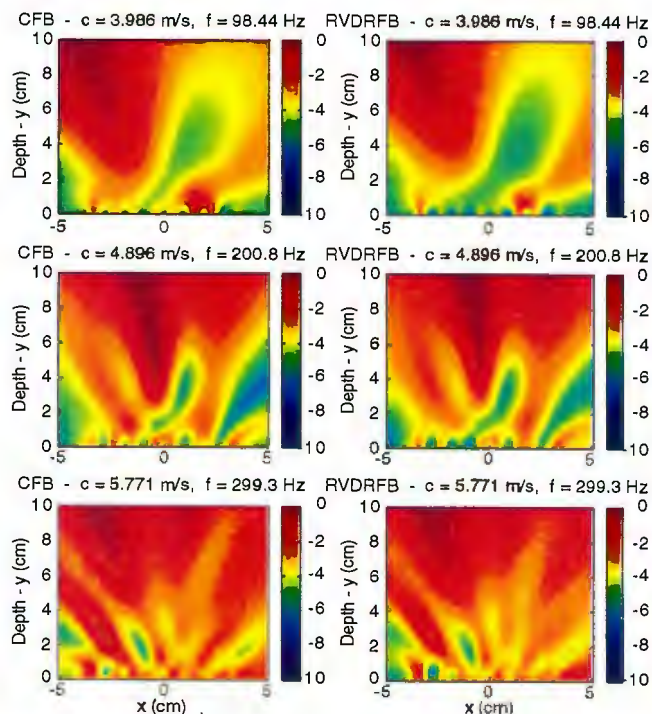


Figure A-45. Image of Data Set 908: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 908_32_512.csd
 Runname: 908_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.258
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 1.28
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.047
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 0.2428
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.43
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): -0.1639
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

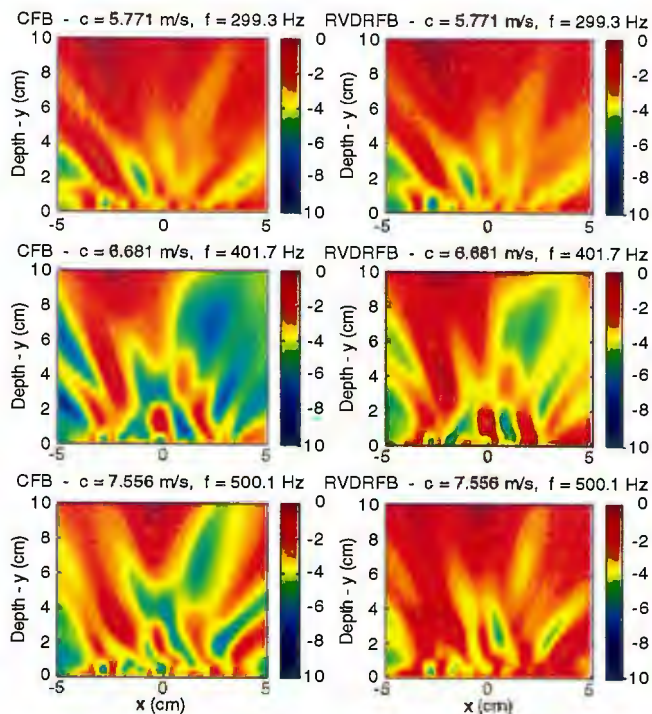


Figure A-46. Image of Data Set 908: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 908_64_256.csd
 Runname: 908_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.491
 CFB Surface Maximum Location
 X (cm): -4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 4.437
 RVDR Surface Maximum Location
 X (cm): -4.184 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.469
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 1.514
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.892
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 0.987
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

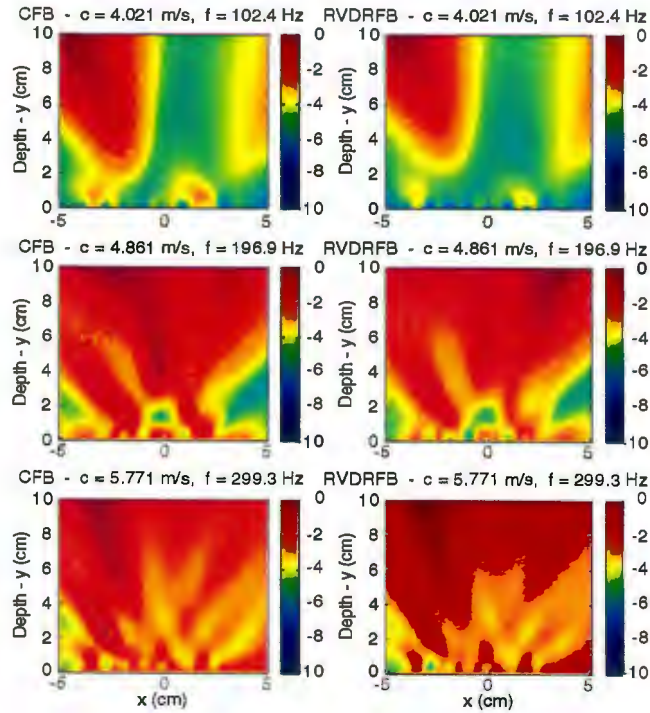


Figure A-47. Image of Data Set 908: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 908_64_256.csd
 Runname: 908_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.892
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 0.987
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.785
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.7475
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.609
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.08587
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

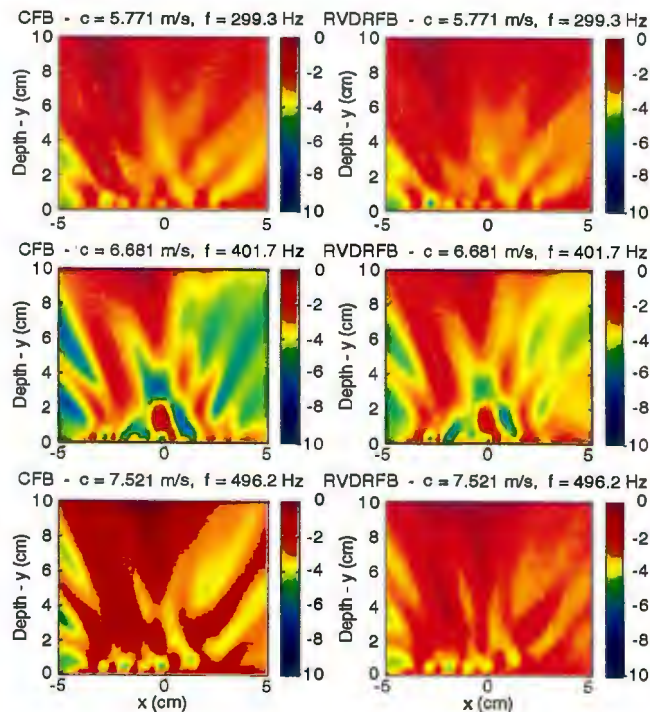


Figure A-48. Image of Data Set 908: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 909_16_1024.csd
 Runname: 909_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.447
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 7.98
 RVDR Surface Normalization (dB): 4.582
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.656
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 6.363
 RVDR Surface Normalization (dB): 2.609
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 6.767

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.565
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.943
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

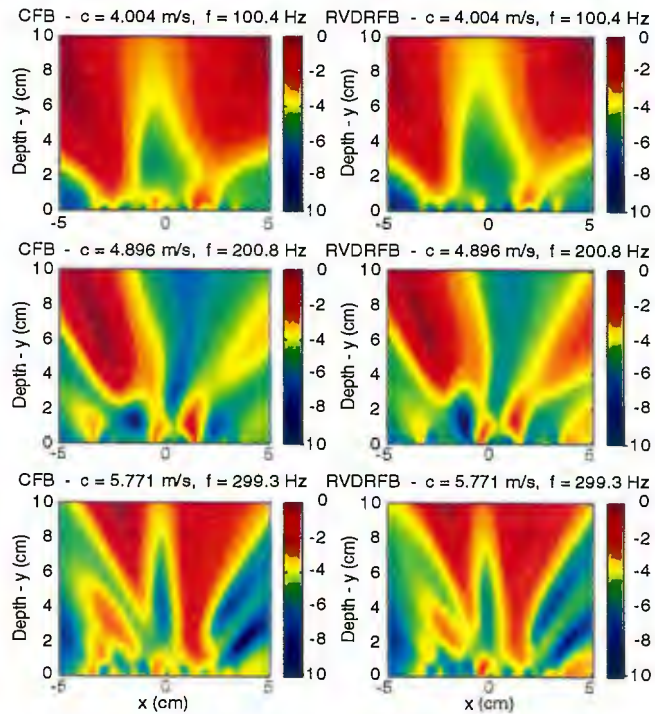


Figure A-49. Image of Data Sets 909: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 909_16_1024.csd
 Runname: 909_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.565
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.943
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.163
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.2859
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.988
 CFB Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.488
 RVDR Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10

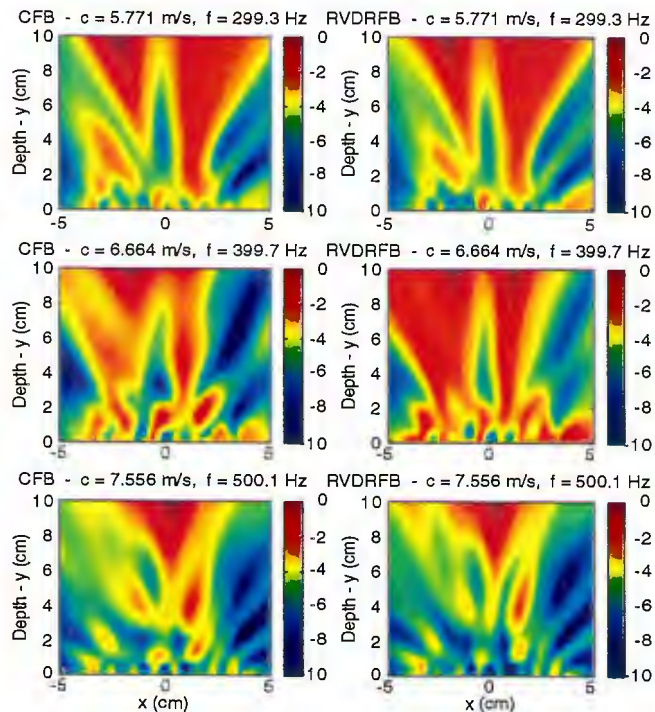


Figure A-50. Image of Data Set 909: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 909_32_512.csd
 Runname: 909_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.03
 CFB Surface Maximum Location
 X (cm): -4.796 Y (cm): 10
 RVDR Surface Normalization (dB): 4.061
 RVDR Surface Maximum Location
 X (cm): -4.796 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.188
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 5.555
 RVDR Surface Normalization (dB): 2.859
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 5.959

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.345
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.825
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

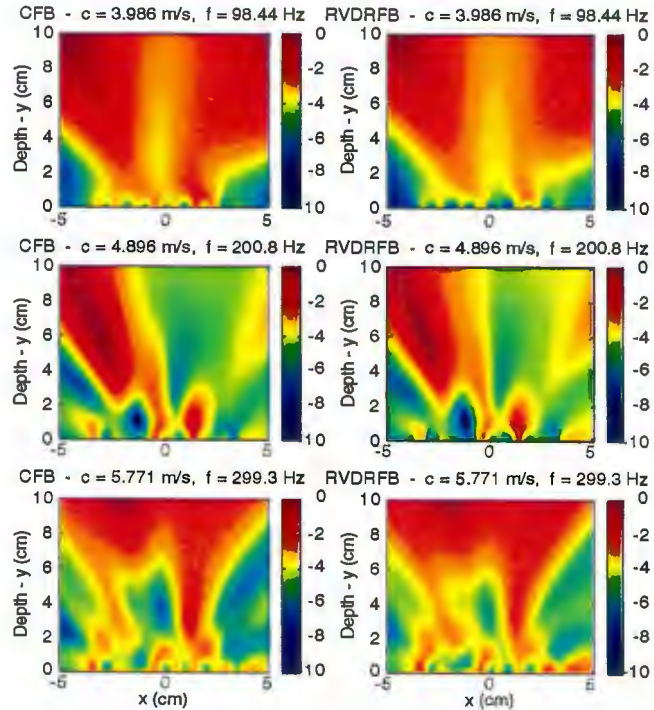


Figure A-51. Image of Data Set 909: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 909_32_512.csd
 Runname: 909_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.345
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.825
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.727
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.159
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.321
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.445
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

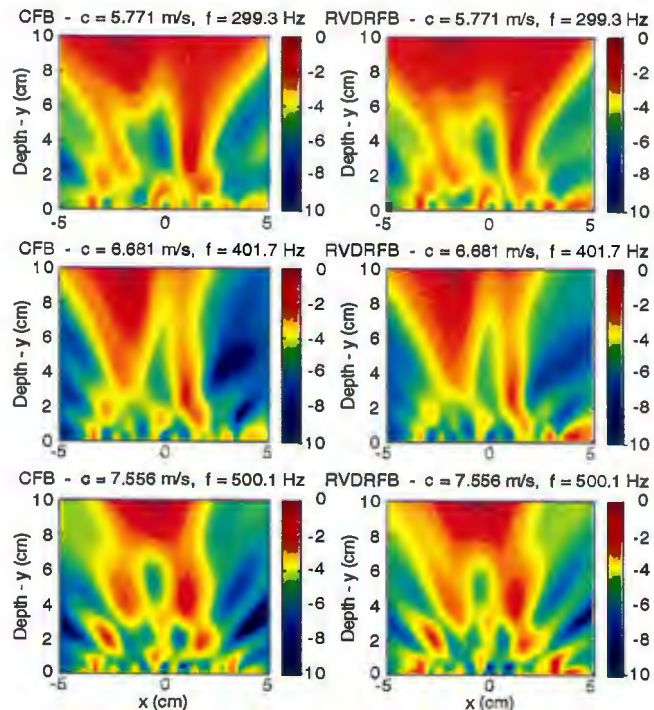


Figure A-52. Image of Data Set 909: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 909_64_256.csd
 Runname: 909_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.948
 CFB Surface Maximum Location
 X (cm): 5 Y (cm): 10
 RVDR Surface Normalization (dB): 4.132
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 9.798

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.255
 CFB Surface Maximum Location
 X (cm): -4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 4.289
 RVDR Surface Maximum Location
 X (cm): -4.388 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.998
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.786
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

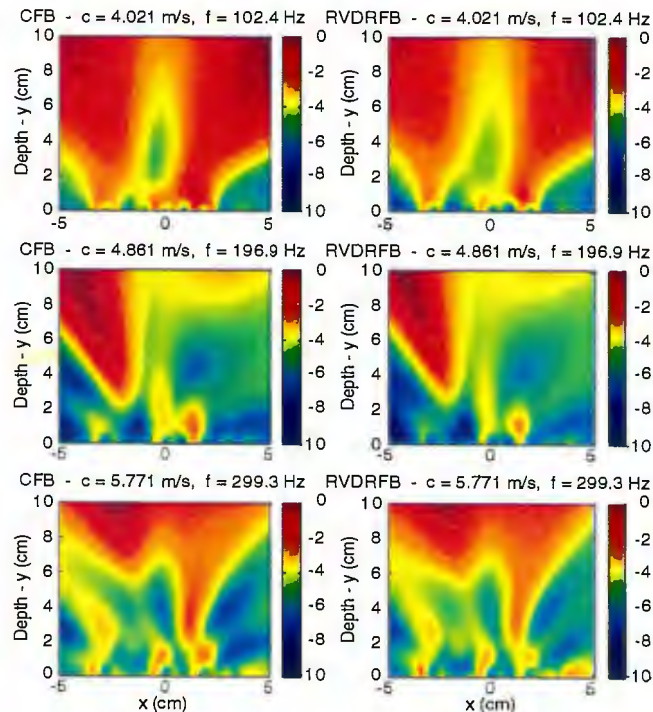


Figure A-53. Image of Data Set 909: 64 FFTs, 15 Channels Used At 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 909_64_256.csd
 Runname: 909_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.998
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.786
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.837
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.122
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.595
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.248
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

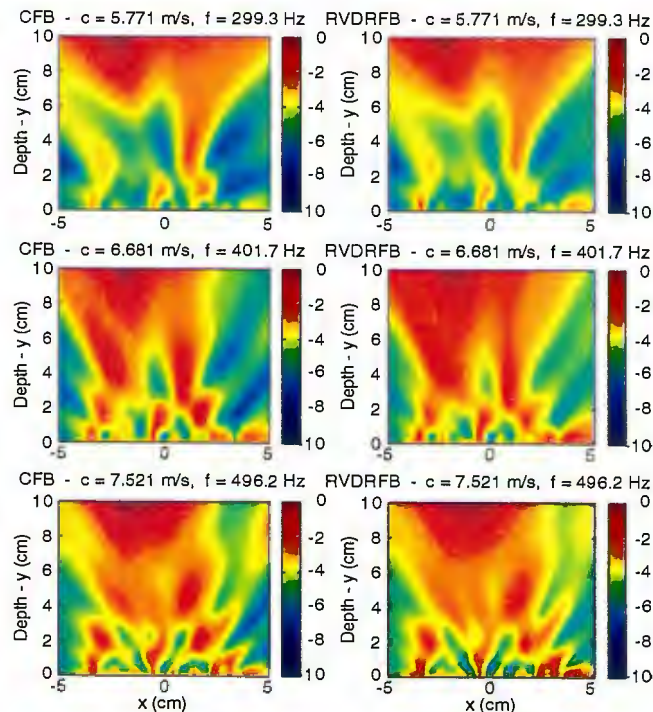


Figure A-54. Image of Data Set 909: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 910_16_1024.csd
 Runname: 910_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.574
 CFB Surface Maximum Location
 X (cm): -4.796 Y (cm): 10
 RVDR Surface Normalization (dB): 2.966
 RVDR Surface Maximum Location
 X (cm): -4.592 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.728
 CFB Surface Maximum Location
 X (cm): -4.592 Y (cm): 9.798
 RVDR Surface Normalization (dB): 3.439
 RVDR Surface Maximum Location
 X (cm): -4.592 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.827
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.377
 RVDR Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10

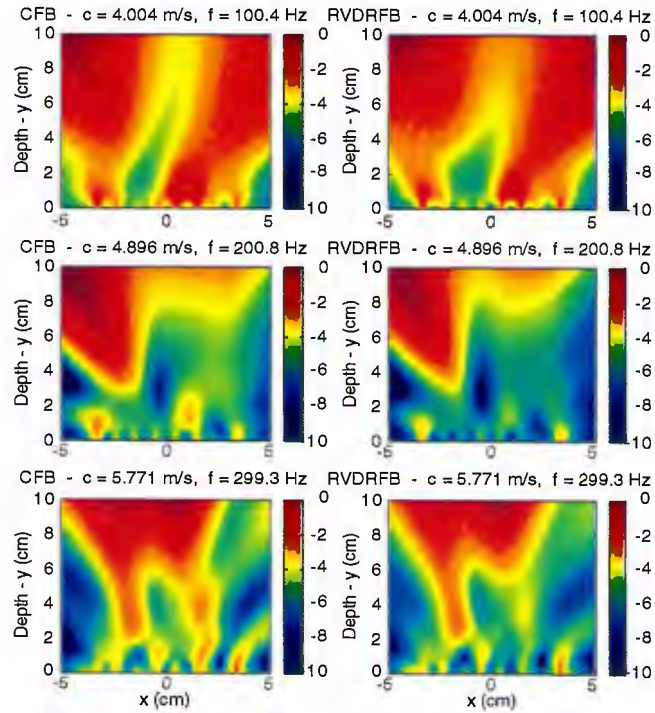


Figure A-55. Image of Data Set 910: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 910_16_1024.csd
 Runname: 910_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.827
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.377
 RVDR Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.125
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.273
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.018
 CFB Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1
 RVDR Surface Normalization (dB): 1.127
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1

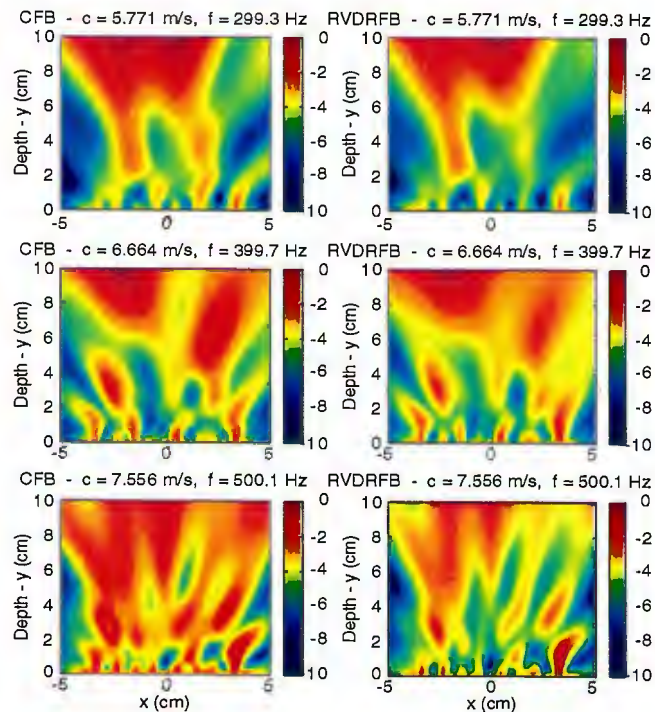


Figure A-56. Image of Data set 910: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 910_32_512.csd
 Runname: 910_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.635
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 10
 RVDR Surface Normalization (dB): 3.81
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.276
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 7.98
 RVDR Surface Normalization (dB): 3.04
 RVDR Surface Maximum Location
 X (cm): -4.388 Y (cm): 8.99

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.222
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.133
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

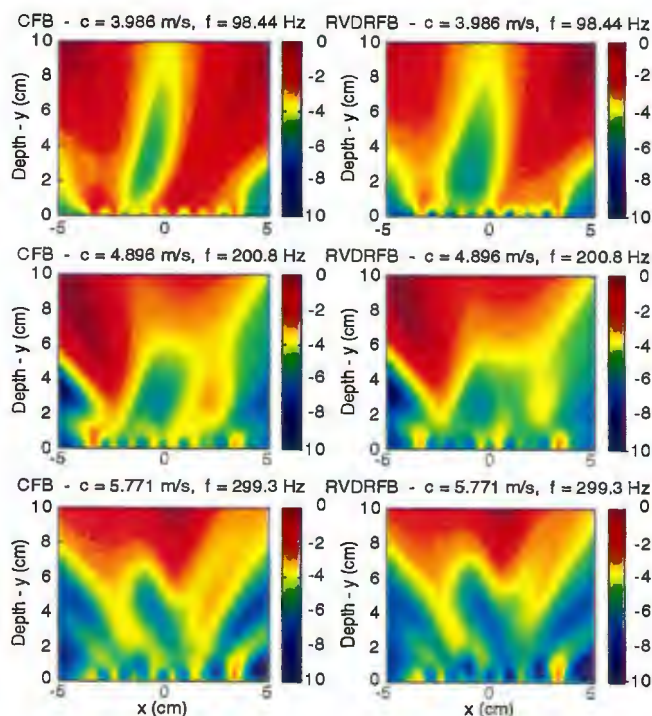


Figure A-57. Image of Data Set 910: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 910_32_512.csd
 Runname: 910_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.222
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.133
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.099
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.083
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.036
 CFB Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1
 RVDR Surface Normalization (dB): 1.252
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1

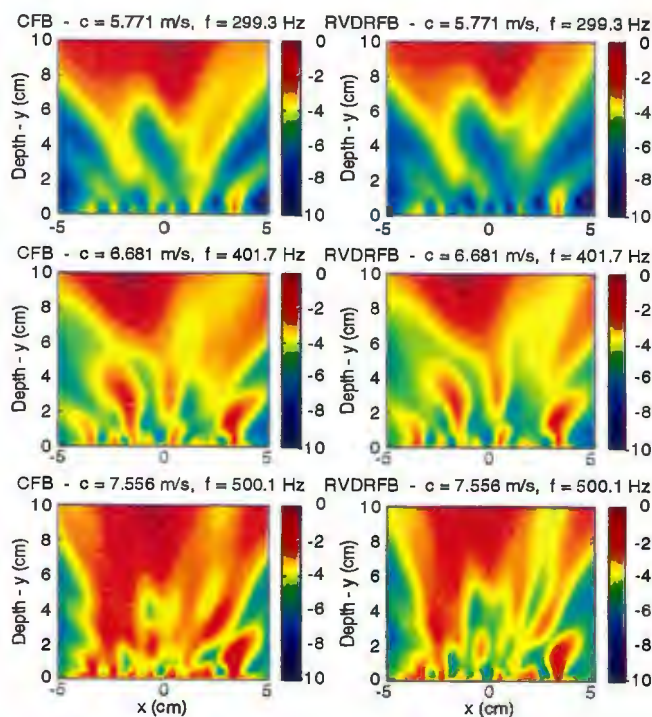


Figure A-58. Image of Data Set 910: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 910_64_256.csd
 Runname: 910_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 8

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.459
 CFB Surface Maximum Location
 X (cm): -4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 3.374
 RVDR Surface Maximum Location
 X (cm): -3.98 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.747
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 2.071
 RVDR Surface Maximum Location
 X (cm): -4.184 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.182
 CFB Surface Maximum Location
 X (cm): 0.3081 Y (cm): 10
 RVDR Surface Normalization (dB): 3.138
 RVDR Surface Maximum Location
 X (cm): 0.3081 Y (cm): 10

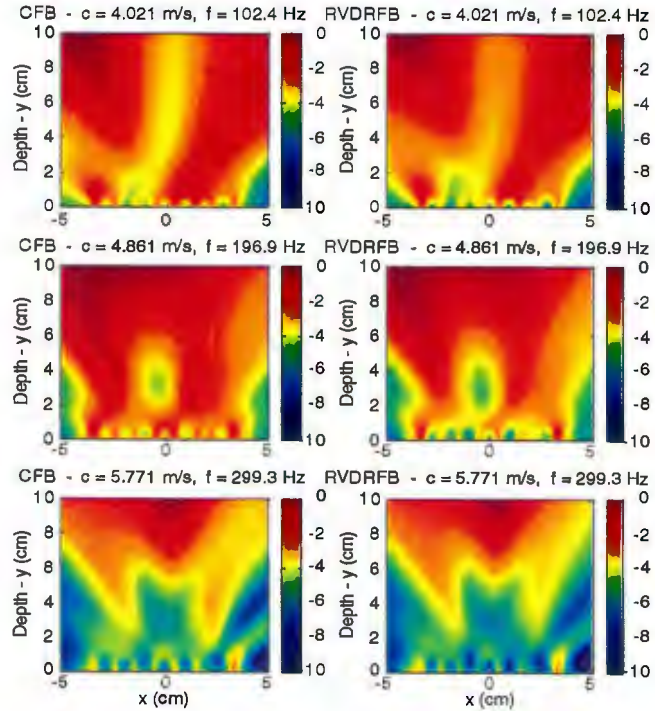


Figure A-59. Image of Data Set 910: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 910_64_256.csd
 Runname: 910_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.182
 CFB Surface Maximum Location
 X (cm): 0.3081 Y (cm): 10
 RVDR Surface Normalization (dB): 3.138
 RVDR Surface Maximum Location
 X (cm): 0.3081 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.834
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.048
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.854
 CFB Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1
 RVDR Surface Normalization (dB): 1.127
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1

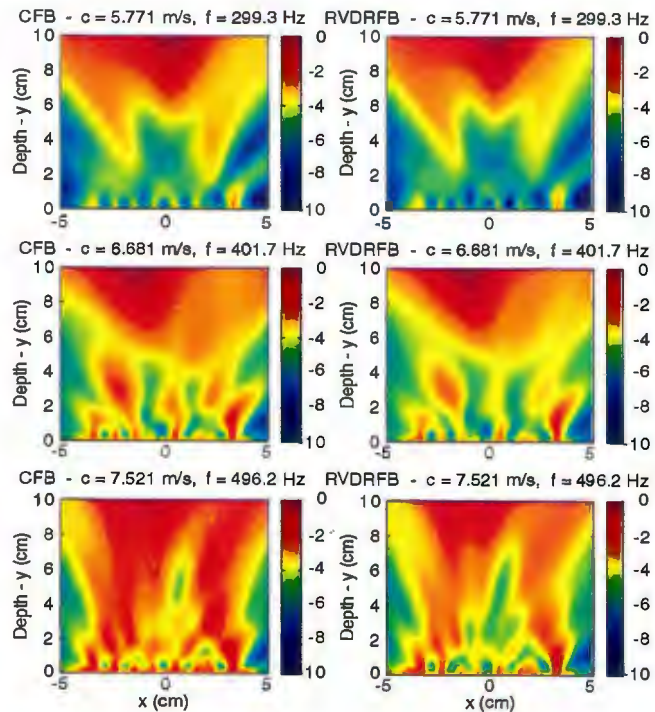


Figure A-60. Image of Data Set 910: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 911_16_1024.csd
 Runname: 911_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.76
 CFB Surface Maximum Location
 X (cm): -3.571 Y (cm): 10
 RVDR Surface Normalization (dB): 2.621
 RVDR Surface Maximum Location
 X (cm): 4.796 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.275
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 3.24
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.252
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 8.586
 RVDR Surface Normalization (dB): 1.62
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

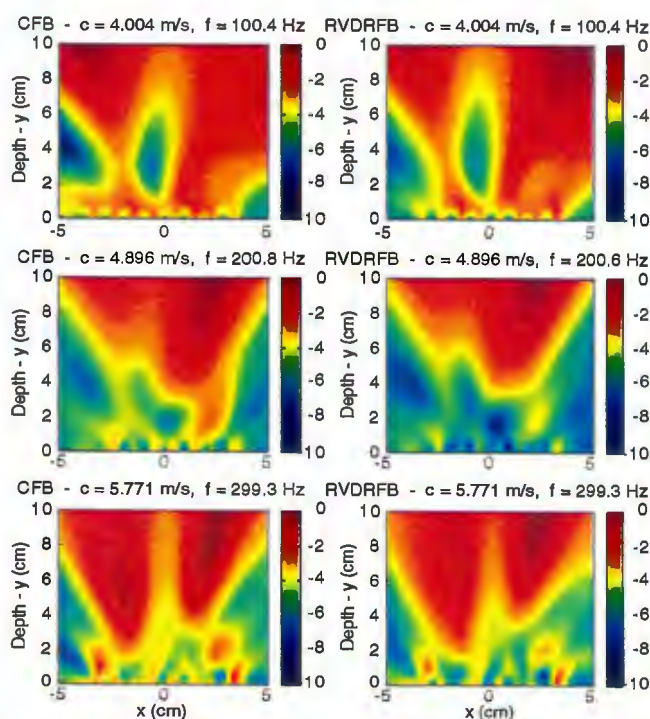


Figure A-61. Image of Data Set 911: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 911_16_1024.csd
 Runname: 911_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.252
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 8.586
 RVDR Surface Normalization (dB): 1.62
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.748
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.8892
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.6
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.8942
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

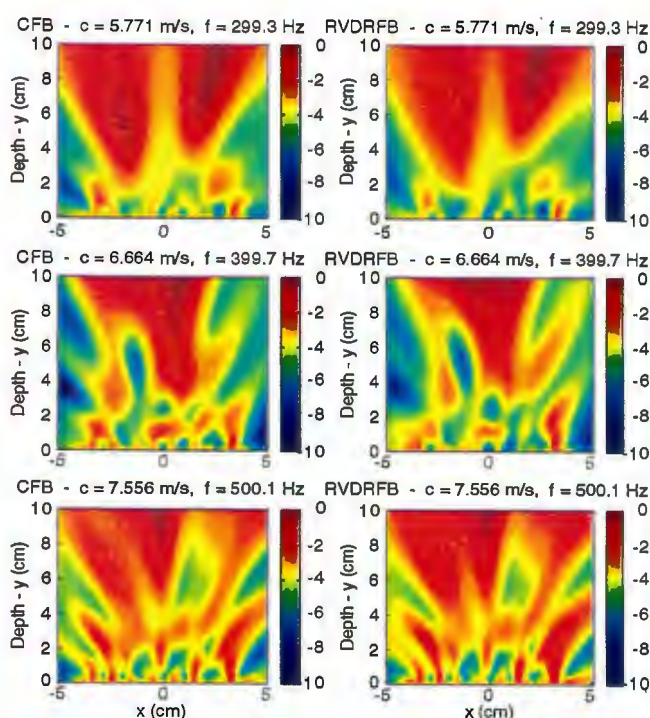


Figure A-62. Image of Data Set 911: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 911_32_512.csd

Runname: 911_32_512

Diastolic Phase

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 32

Number of Points per FFT: 512

Frequency Bin Resolution (Hz): 3.938

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 5.675

CFB Surface Maximum Location

X (cm): -3.571 Y (cm): 10

RVDR Surface Normalization (dB): 3.645

RVDR Surface Maximum Location

X (cm): -3.776 Y (cm): 10

Frequency 200 Hz

CFB Surface Normalization (dB): 3.826

CFB Surface Maximum Location

X (cm): -1.531 Y (cm): 10

RVDR Surface Normalization (dB): 2.798

RVDR Surface Maximum Location

X (cm): -1.531 Y (cm): 10

Frequency 300 Hz

CFB Surface Normalization (dB): 3.335

CFB Surface Maximum Location

X (cm): 2.551 Y (cm): 10

RVDR Surface Normalization (dB): 1.99

RVDR Surface Maximum Location

X (cm): 2.755 Y (cm): 10

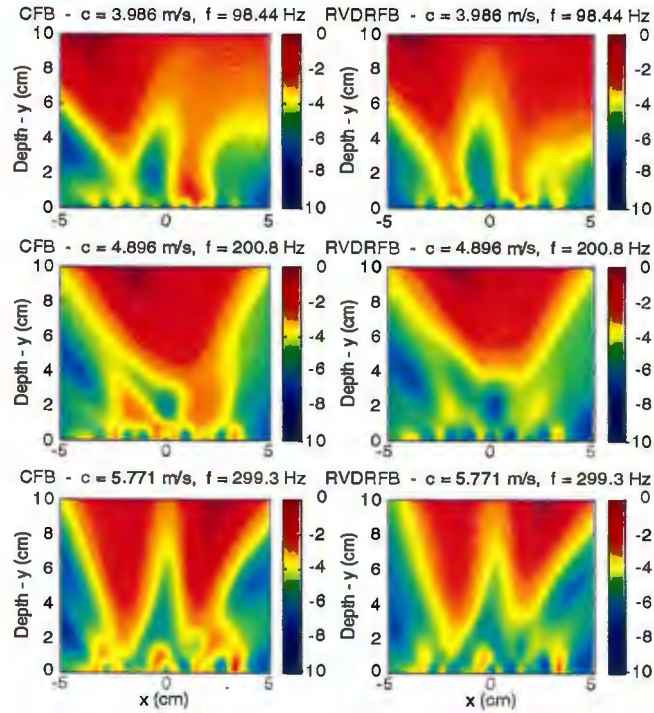


Figure A-63. Image of Data Set 911: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 911_32_512.csd

Runname: 911_32_512

Diastolic Phase

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 32

Number of Points per FFT: 512

Frequency Bin Resolution (Hz): 3.938

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 3.335

CFB Surface Maximum Location

X (cm): 2.551 Y (cm): 10

RVDR Surface Normalization (dB): 1.99

RVDR Surface Maximum Location

X (cm): 2.755 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 2.48

CFB Surface Maximum Location

X (cm): -1.735 Y (cm): 10

RVDR Surface Normalization (dB): 0.7892

RVDR Surface Maximum Location

X (cm): 3.367 Y (cm): 0.1

Frequency 500 Hz

CFB Surface Normalization (dB): 2.252

CFB Surface Maximum Location

X (cm): -0.102 Y (cm): 10

RVDR Surface Normalization (dB): 0.349

RVDR Surface Maximum Location

X (cm): -0.3061 Y (cm): 10

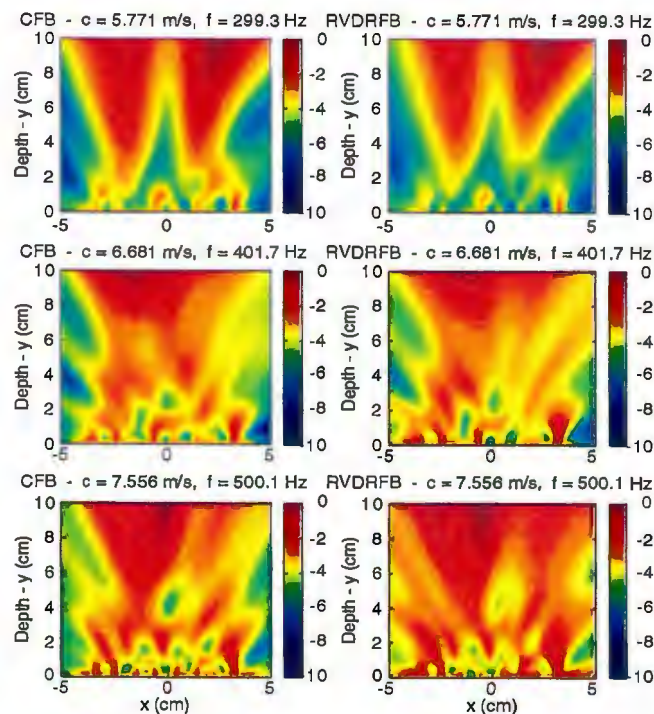


Figure A-64. Image of Data Set 911: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 911_64_256.csd
 Runname: 911_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.997
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 10
 RVDR Surface Normalization (dB): 4.266
 RVDR Surface Maximum Location
 X (cm): -3.571 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.082
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.988
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.637
 CFB Surface Maximum Location
 X (cm): 2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.196
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

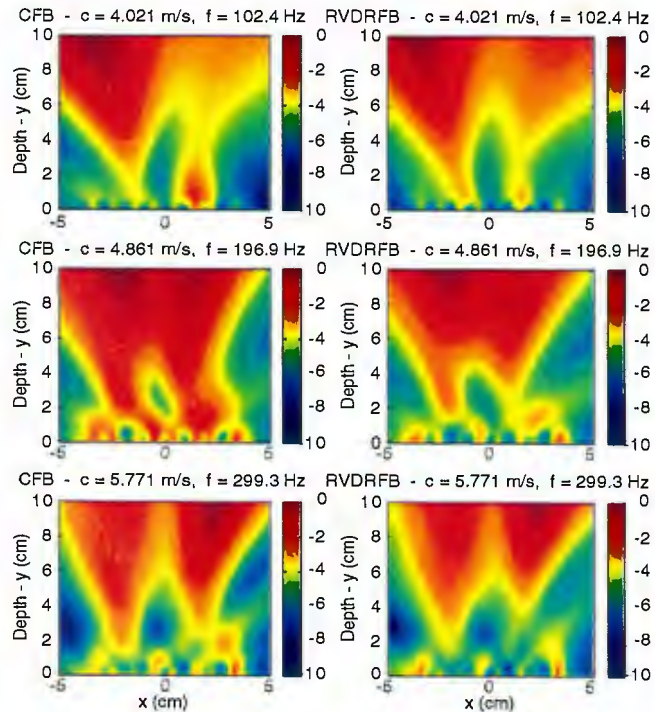


Figure A-65. Image of Data Set 911: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 911_64_256.csd
 Runname: 911_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.637
 CFB Surface Maximum Location
 X (cm): 2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.196
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.008
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 0.894
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.248
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.5384
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

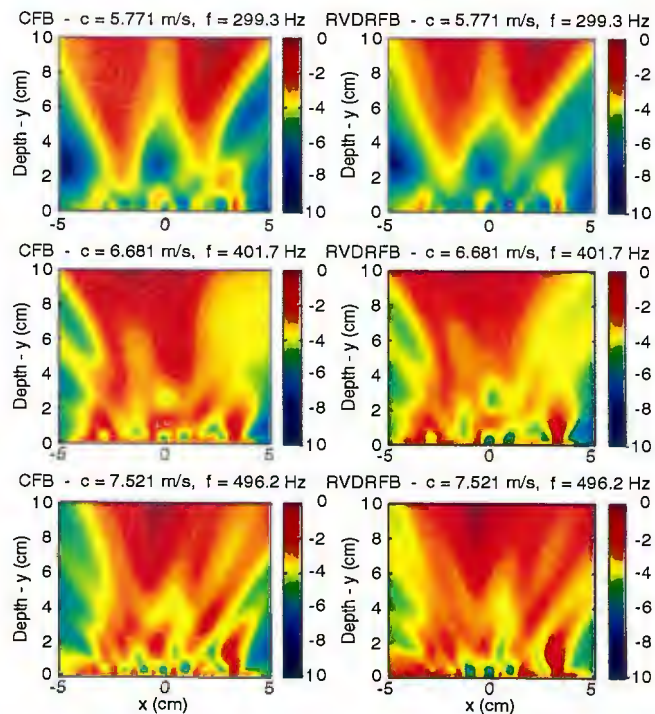


Figure A-66. Image of Data Set 911: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 912_16_1024.csd
 Runname: 912_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.367
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 5.959
 RVDR Surface Normalization (dB): 4.146
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 8.99

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.375
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.14
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.071
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 1.087
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

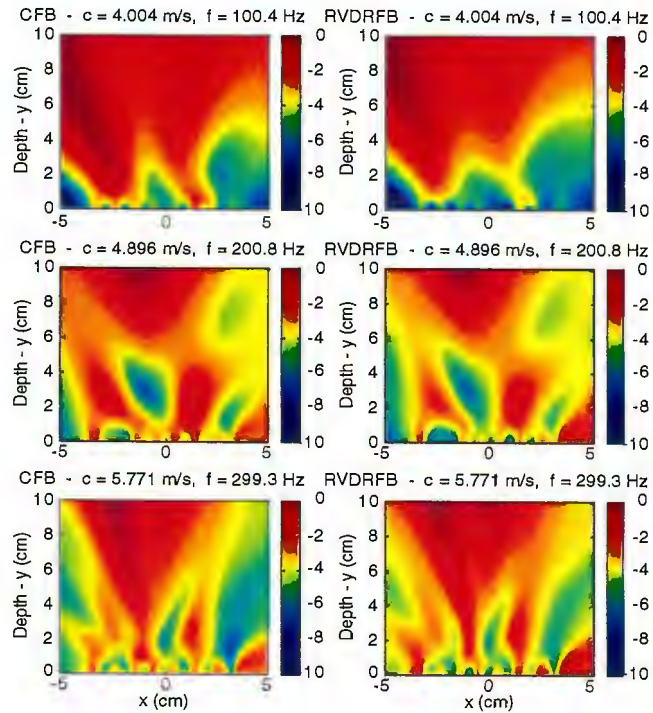


Figure A-67. Image of Data Set 912: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 912_16_1024.csd
 Runname: 912_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.071
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 1.087
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.955
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.4341
 RVDR Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.817
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.442
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

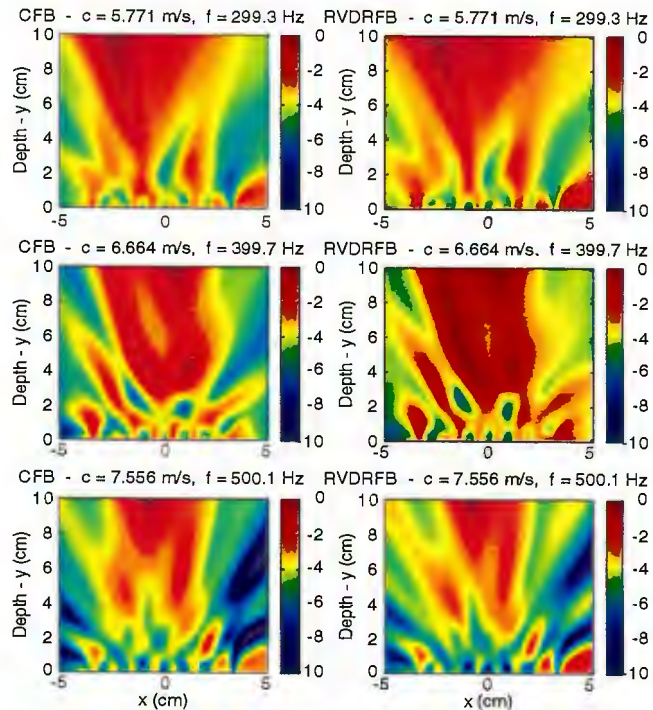


Figure A-68. Image of Data Set 912: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 912_32_512.csd
 Runname: 912_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.268
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 7.98
 RVDR Surface Normalization (dB): 5.16
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 8.384

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.514
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 1.387
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.741
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 1.5
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

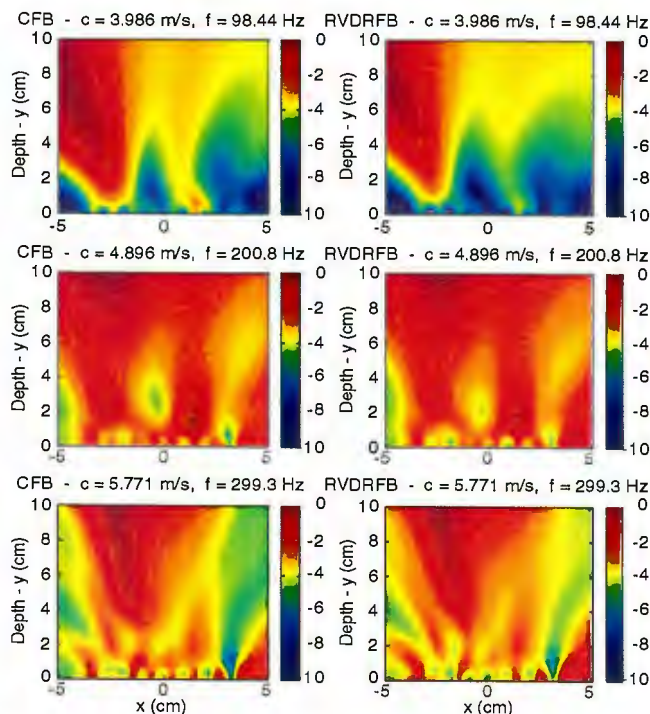


Figure A-69. Image of Data set 912: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 912_32_512.csd
 Runname: 912_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.741
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 1.5
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.373
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 7.576
 RVDR Surface Normalization (dB): 0.9476
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 8.788

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.335
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.061
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

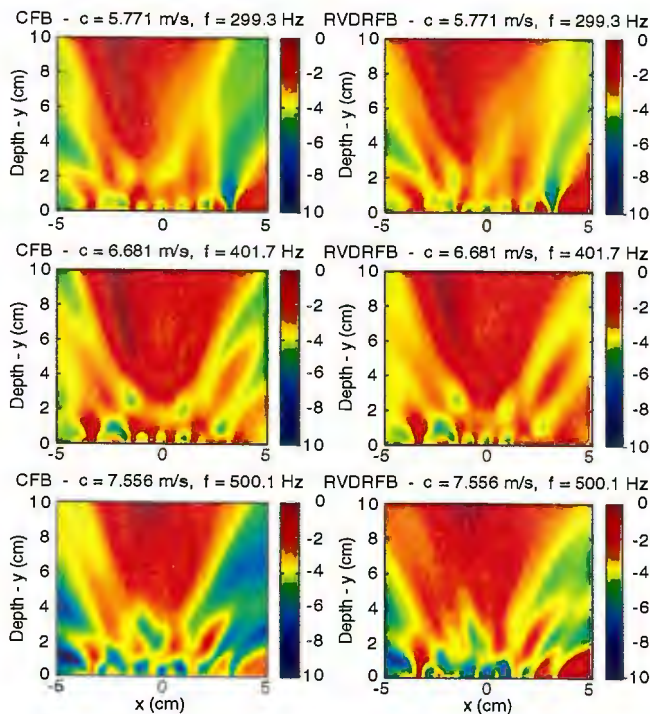


Figure A-70. Image of Data Set 912: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 912_64_256.csd
 Runname: 912_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.888
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 9.596
 RVDR Surface Normalization (dB): 5.167
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.097
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.231
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.518
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.295
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

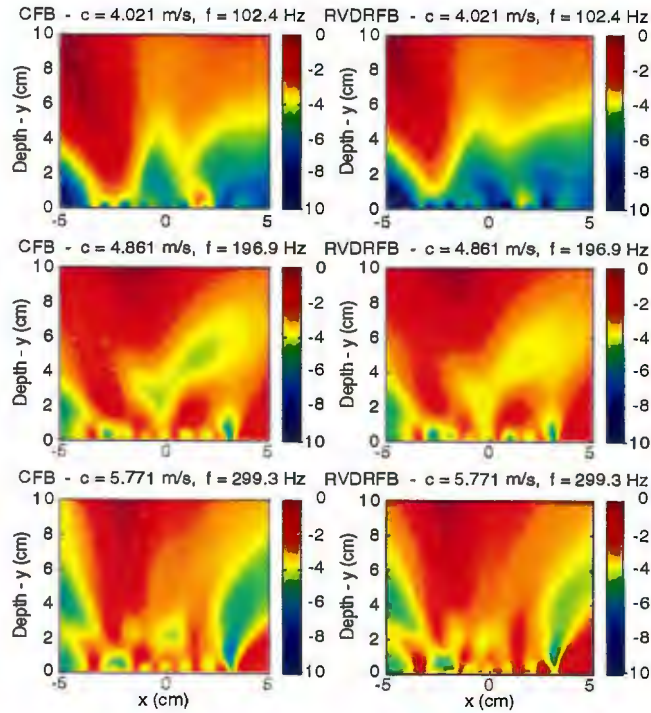


Figure A-71. Image of Data Set 912: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 912_64_256.csd
 Runname: 912_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.518
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.295
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.81
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.268
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.734
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): -0.06953
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

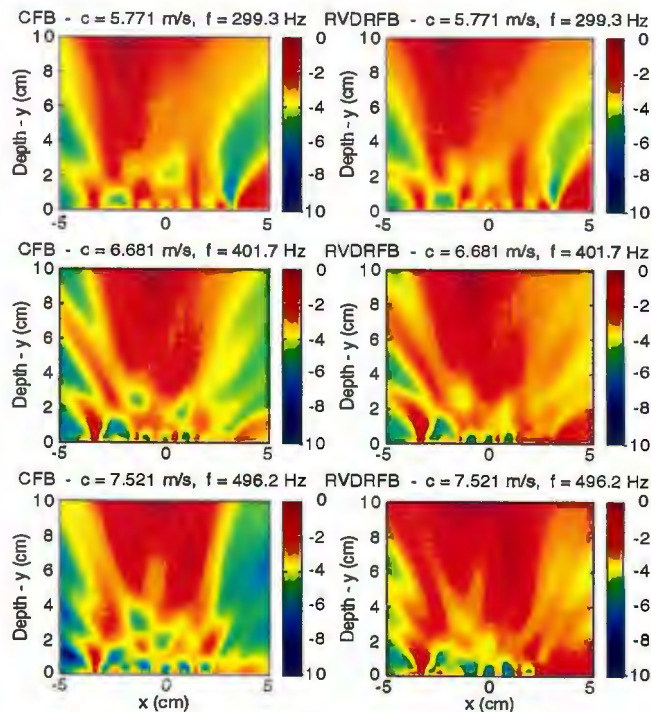


Figure A-72. Image of Data Set 912: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 913_16_1024.csd
 Runname: 913_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.083
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.691
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.993
 CFB Surface Maximum Location
 X (cm): 4.388 Y (cm): 3.333
 RVDR Surface Normalization (dB): 2.293
 RVDR Surface Maximum Location
 X (cm): 4.592 Y (cm): 3.535

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.468
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 0.5041
 RVDR Surface Normalization (dB): 1.732
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 0.5041

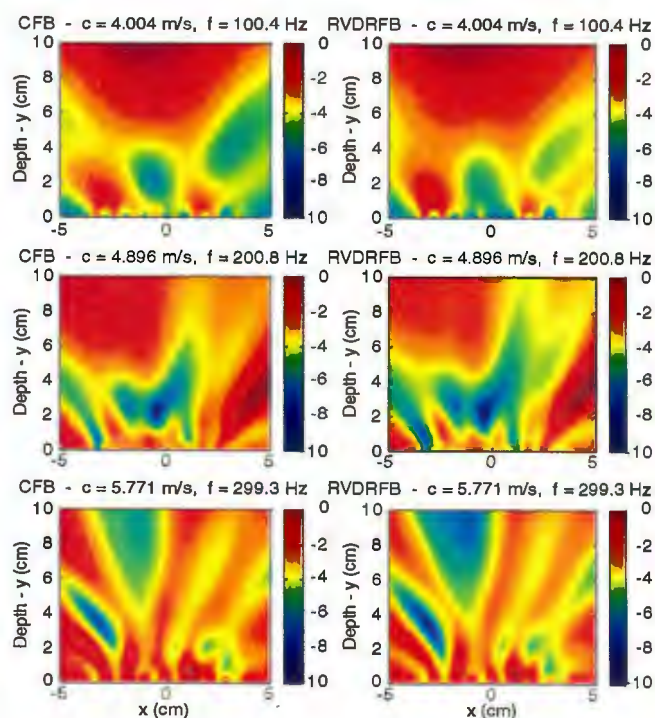


Figure A-73. Image of Data Set 913: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 913_16_1024.csd
 Runname: 913_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.468
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 0.5041
 RVDR Surface Normalization (dB): 1.732
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 0.5041

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.071
 CFB Surface Maximum Location
 X (cm): 3.163 Y (cm): 1.11
 RVDR Surface Normalization (dB): 1.728
 RVDR Surface Maximum Location
 X (cm): 3.163 Y (cm): 1.11

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.954
 CFB Surface Maximum Location
 X (cm): 4.592 Y (cm): 2.929
 RVDR Surface Normalization (dB): 1.964
 RVDR Surface Maximum Location
 X (cm): 4.592 Y (cm): 2.727

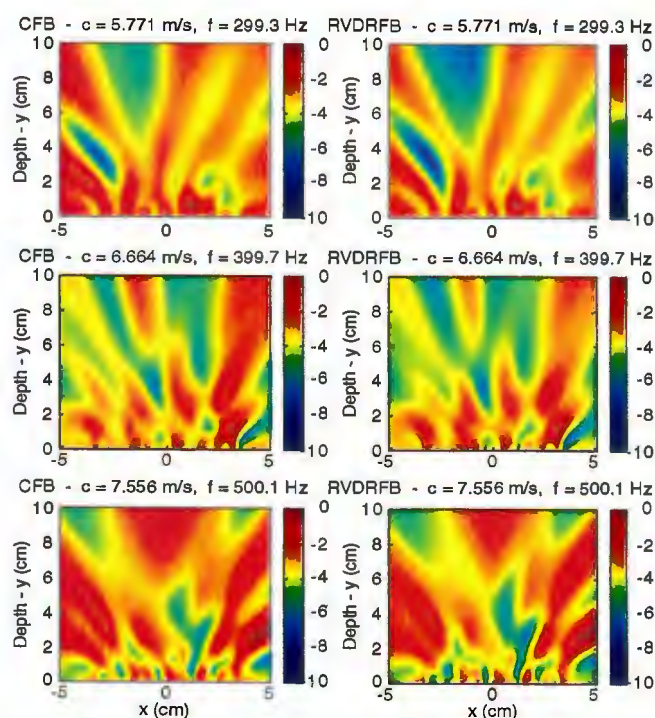


Figure A-74. Image of Data Set 913: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 913_32_512.csd
 Runname: 913_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.751
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 4.285
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.584
 CFB Surface Maximum Location
 X (cm): 4.592 Y (cm): 2.929
 RVDR Surface Normalization (dB): 1.991
 RVDR Surface Maximum Location
 X (cm): 4.796 Y (cm): 3.333

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.873
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 0.5041
 RVDR Surface Normalization (dB): 1.288
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 0.5041

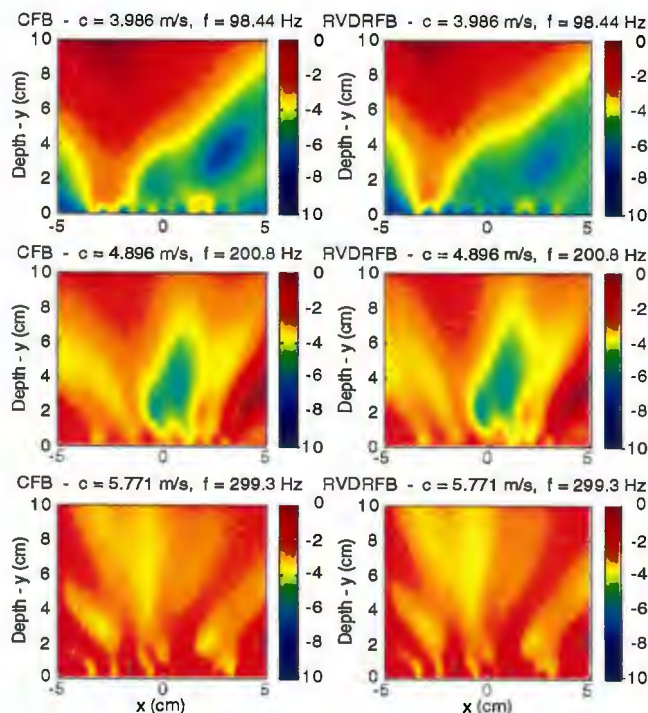


Figure A-75. Image of Data Set 913: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 913_32_512.csd
 Runname: 913_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.873
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 0.5041
 RVDR Surface Normalization (dB): 1.288
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 0.5041

Frequency 400 Hz
 CFB Surface Normalization (dB): 1.858
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 0.5041
 RVDR Surface Normalization (dB): 1.264
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 0.5041

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.081
 CFB Surface Maximum Location
 X (cm): 4.796 Y (cm): 3.131
 RVDR Surface Normalization (dB): 1.504
 RVDR Surface Maximum Location
 X (cm): 4.796 Y (cm): 3.131

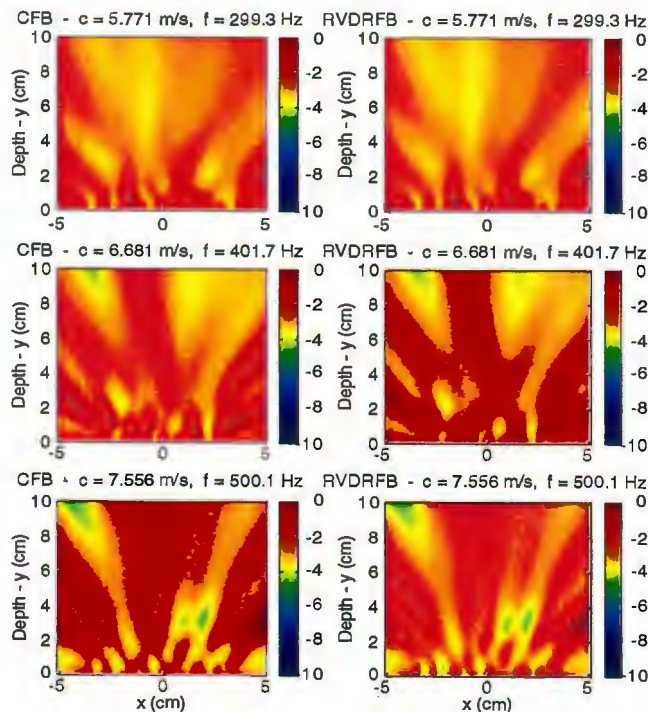


Figure A-76. Image of Data Set 913: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 913_64_256.csd
 Runname: 913_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.336
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 4.169
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.291
 CFB Surface Maximum Location
 X (cm): 3.776 Y (cm): 1.918
 RVDR Surface Normalization (dB): 1.862
 RVDR Surface Maximum Location
 X (cm): 3.98 Y (cm): 2.12

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.356
 CFB Surface Maximum Location
 X (cm): 5 Y (cm): 2.12
 RVDR Surface Normalization (dB): 1.154
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 2.12

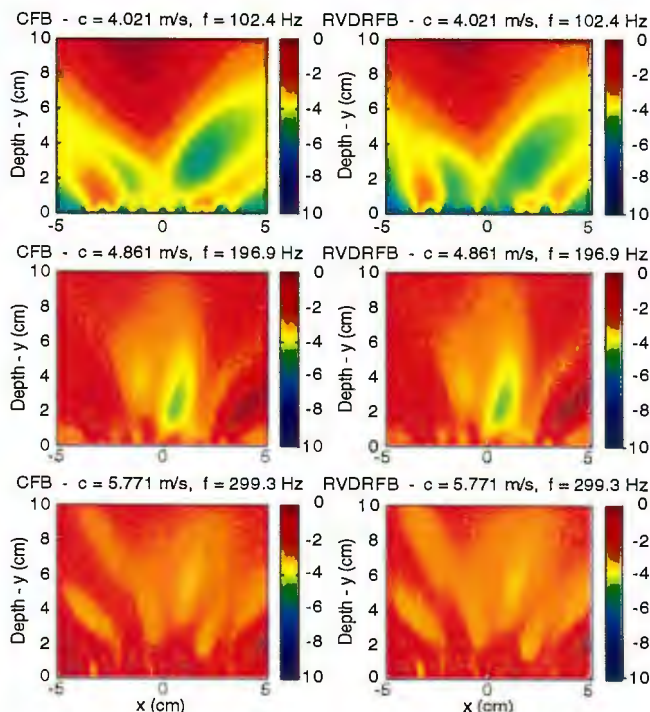


Figure A-77. Image of Data Set 913: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 913_64_256.csd
 Runname: 913_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.356
 CFB Surface Maximum Location
 X (cm): 5 Y (cm): 2.12
 RVDR Surface Normalization (dB): 1.154
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 2.12

Frequency 400 Hz
 CFB Surface Normalization (dB): 1.897
 CFB Surface Maximum Location
 X (cm): 3.163 Y (cm): 0.9082
 RVDR Surface Normalization (dB): 1.521
 RVDR Surface Maximum Location
 X (cm): 3.163 Y (cm): 1.11

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.883
 CFB Surface Maximum Location
 X (cm): 3.367 Y (cm): 1.918
 RVDR Surface Normalization (dB): 1.401
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 1.918

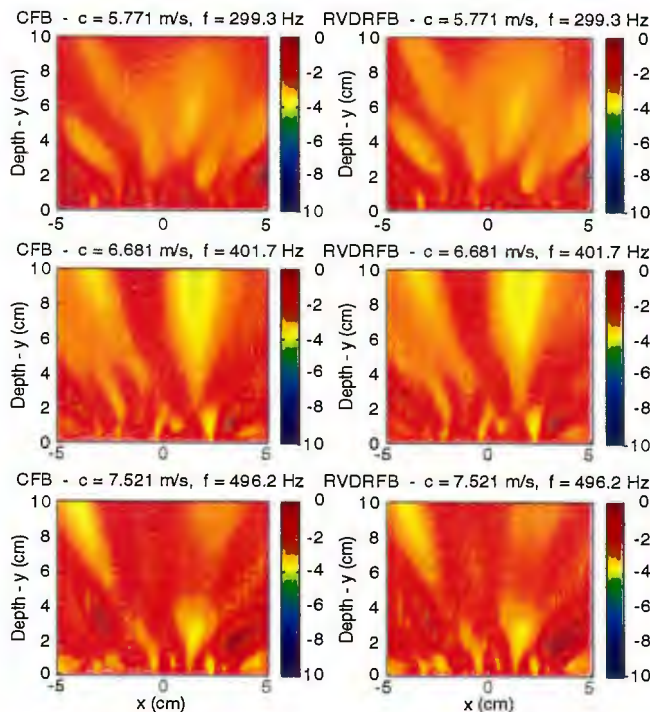


Figure A-78. Image of Data Set 913: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 914_16_1024.csd
 Runname: 914_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.477
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 5.959
 RVDR Surface Normalization (dB): 4.031
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 7.778

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.784
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 1.23
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.142
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 0.3596
 RVDR Surface Maximum Location
 X (cm): 0.9164 Y (cm): 10

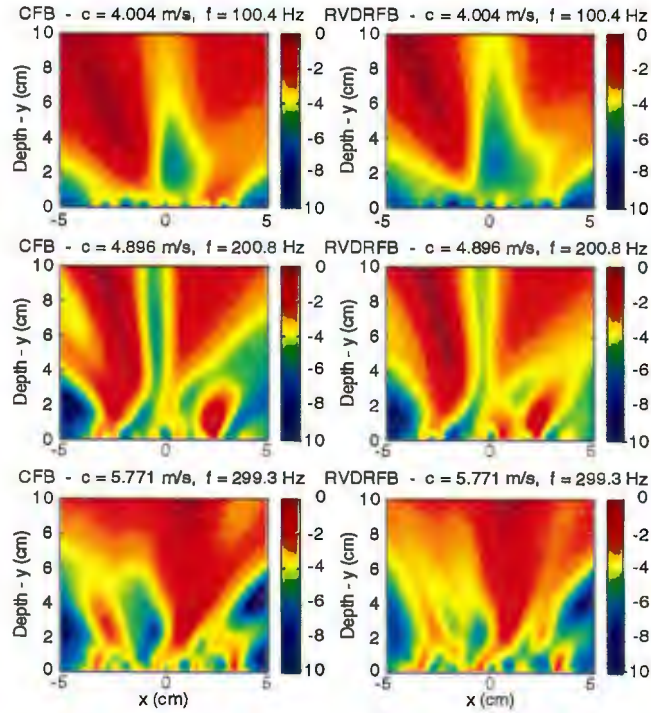


Figure A-79. Image of Data Set 914: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 914_16_1024.csd
 Runname: 914_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.142
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 0.3596
 RVDR Surface Maximum Location
 X (cm): 0.9164 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.986
 CFB Surface Maximum Location
 X (cm): 0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.238
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.894
 CFB Surface Maximum Location
 X (cm): 3.163 Y (cm): 1.312
 RVDR Surface Normalization (dB): -0.1284
 RVDR Surface Maximum Location
 X (cm): 3.163 Y (cm): 1.312

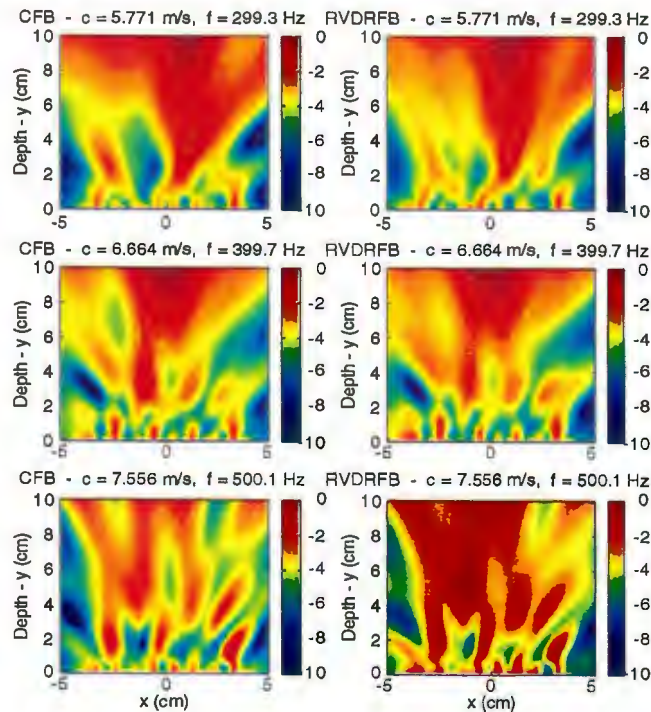


Figure A-80. Image of Data Set 914: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 914_32_512.csd
 Runname: 914_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.992
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 4.747
 RVDR Surface Normalization (dB): 3.815
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 5.959

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.831
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 1.973
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.746
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.573
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

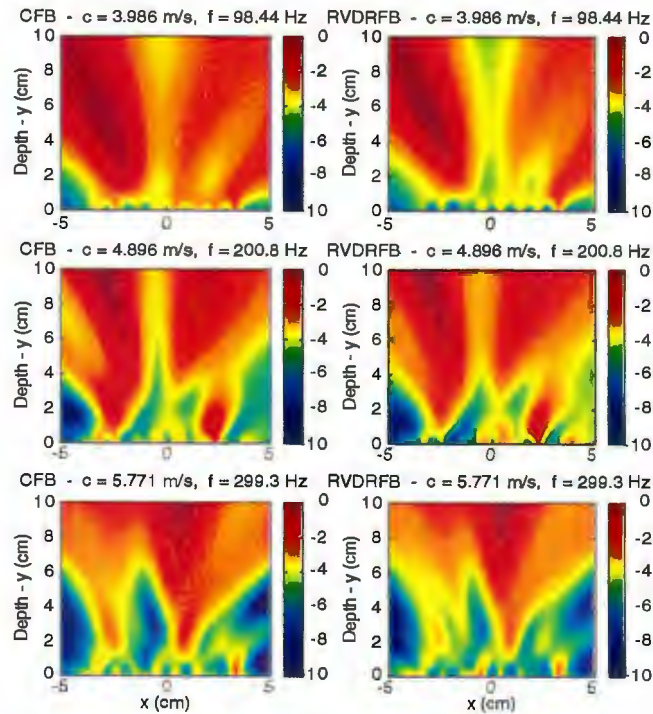


Figure A-81. Image of Data Set 914: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 914_32_512.csd
 Runname: 914_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.746
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.573
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.267
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9957
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.647
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.167
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

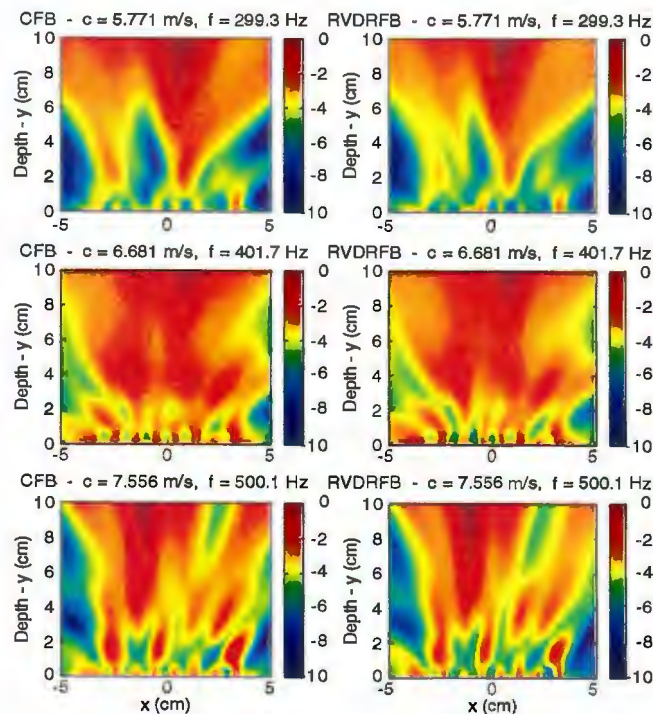


Figure A-82. Image of Data Set 914: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 914_64_256.csd
 Runname: 914_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.235
 CFB Surface Maximum Location
 X (cm): 4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 3.232
 RVDR Surface Maximum Location
 X (cm): -4.388 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.108
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 3.065
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.225
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.11
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

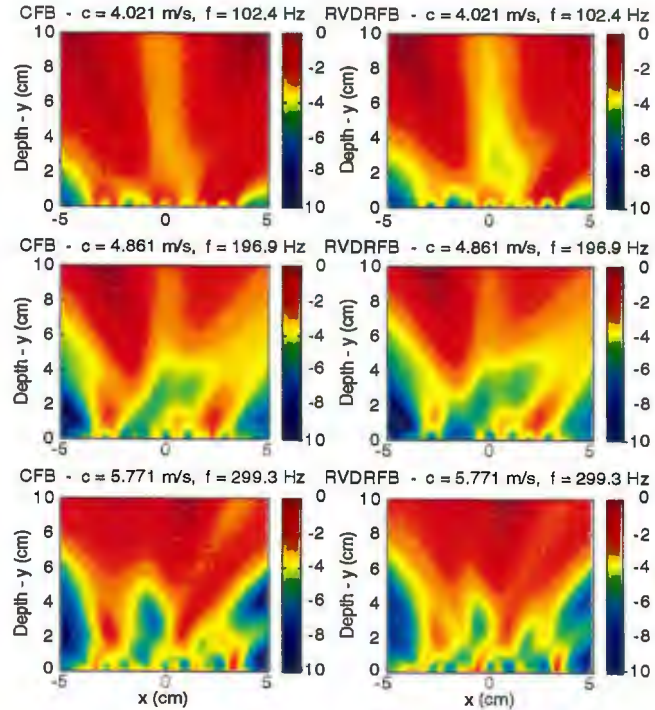


Figure A-83. Image of Data Set 914: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 914_64_256.csd
 Runname: 914_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.225
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.11
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.576
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.337
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.742
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.188
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

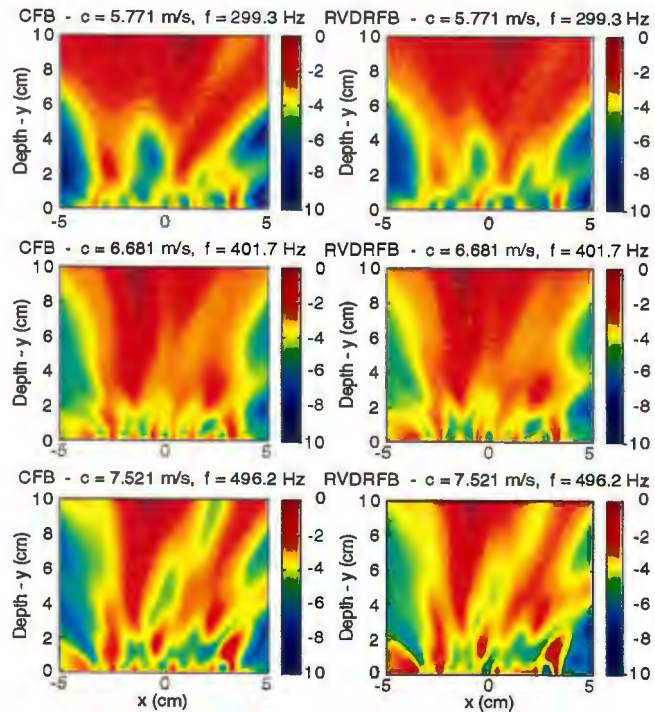


Figure A-84. Image of Data Set 914: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 915_16_1024.csd
 Runname: 915_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.761
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 3.235
 RVDR Surface Maximum Location
 X (cm): 2.347 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.186
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 6.363
 RVDR Surface Normalization (dB): 2.832
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 6.161

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.65
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 10
 RVDR Surface Normalization (dB): 1.206
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

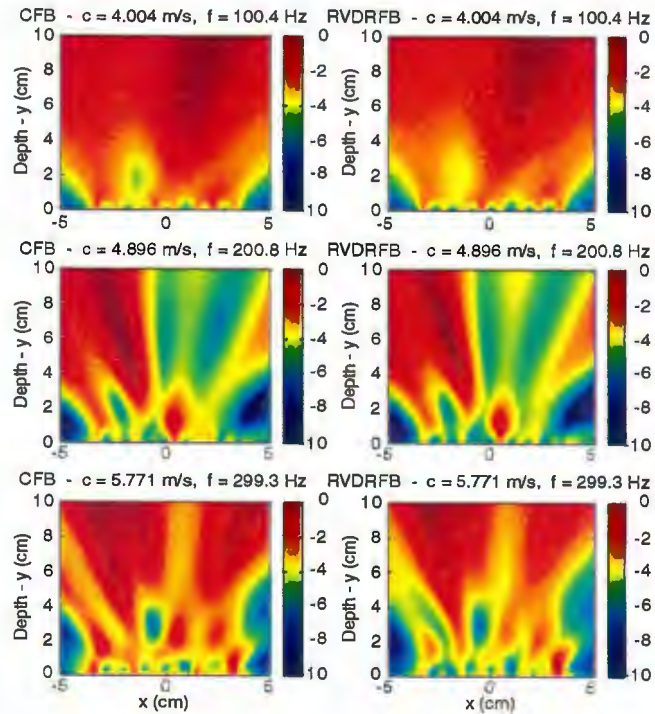


Figure A-85. Image of Data Set 915: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 915_16_1024.csd
 Runname: 915_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.65
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 10
 RVDR Surface Normalization (dB): 1.206
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.186
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.921
 RVDR Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.474
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 1.884
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

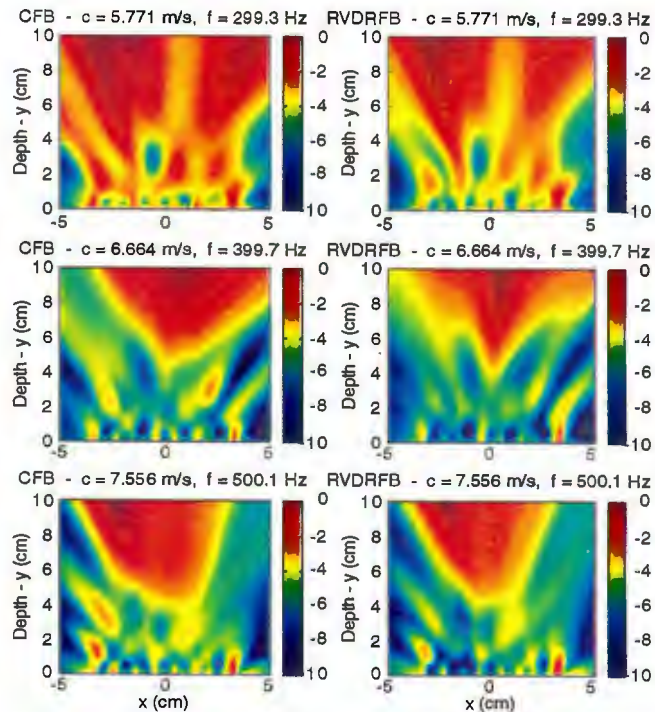


Figure A-86. Image of Data Set 915: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 915_32_512.csd
 Runname: 915_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.05
 CFB Surface Maximum Location
 X (cm): -4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 4.278
 RVDR Surface Maximum Location
 X (cm): -4.388 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.748
 CFB Surface Maximum Location
 X (cm): -4.592 Y (cm): 10
 RVDR Surface Normalization (dB): 2.894
 RVDR Surface Maximum Location
 X (cm): -4.592 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.071
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.769
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

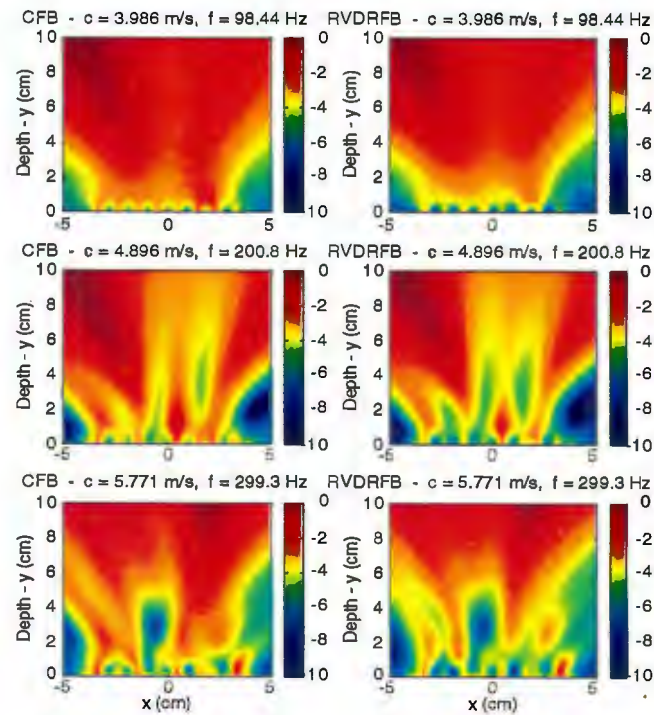


Figure A-87. Image of Data Set 915: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 915_32_512.csd
 Runname: 915_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.071
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.769
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.687
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.713
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.637
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 1.67
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

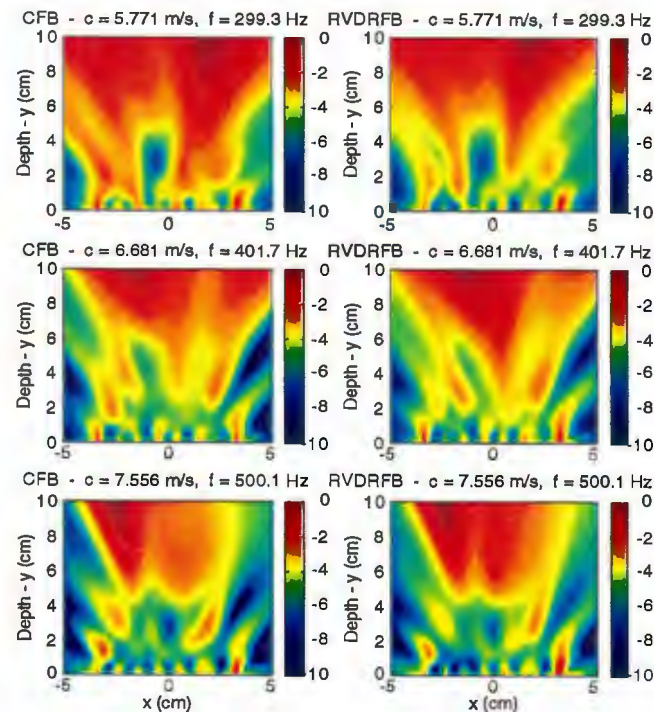


Figure A-88. Image of Data Set 915: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 915_64_256.csd
 Runname: 915_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.931
 CFB Surface Maximum Location
 X (cm): -4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 4.084
 RVDR Surface Maximum Location
 X (cm): -4.388 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.126
 CFB Surface Maximum Location
 X (cm): -3.571 Y (cm): 9.394
 RVDR Surface Normalization (dB): 3.129
 RVDR Surface Maximum Location
 X (cm): -3.778 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.27
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 1.767
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

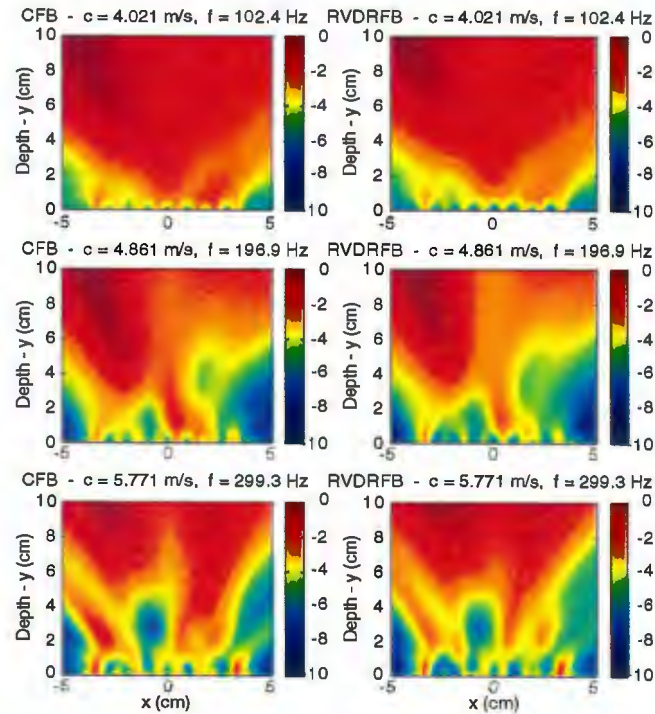


Figure A-89. Image of Data Set 915: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 915_64_256.csd
 Runname: 915_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.27
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 1.767
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.174
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.822
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.849
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 1.174
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1

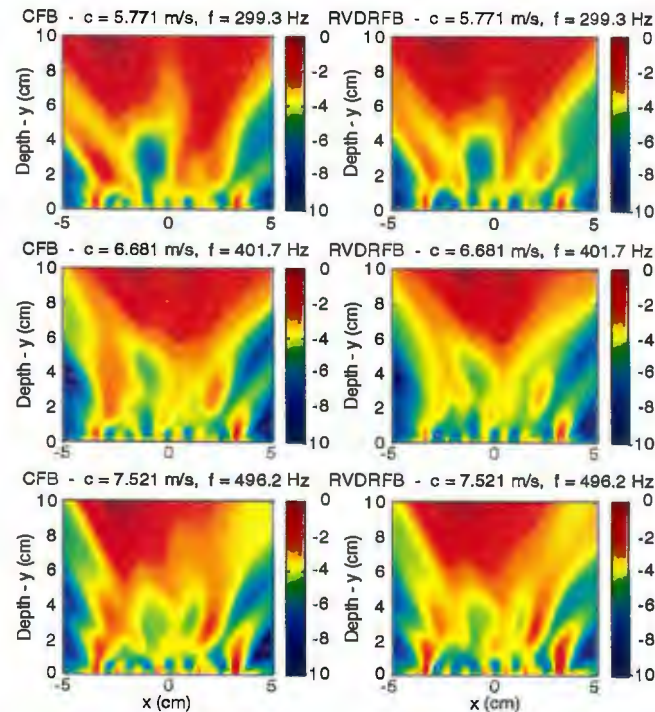


Figure A-90. Image of Data Set 915: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 916_16_1024.csd

Runname: 916_16_1024

Diastolic Phase

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 4.854

CFB Surface Maximum Location

X (cm): -3.571 Y (cm): 10

RVDR Surface Normalization (dB): 3.454

RVDR Surface Maximum Location

X (cm): -3.571 Y (cm): 10

Frequency 200 Hz

CFB Surface Normalization (dB): 5.516

CFB Surface Maximum Location

X (cm): -2.347 Y (cm): 10

RVDR Surface Normalization (dB): 3.915

RVDR Surface Maximum Location

X (cm): -2.551 Y (cm): 10

Frequency 300 Hz

CFB Surface Normalization (dB): 2.698

CFB Surface Maximum Location

X (cm): 0.7143 Y (cm): 10

RVDR Surface Normalization (dB): 0.7941

RVDR Surface Maximum Location

X (cm): -0.9184 Y (cm): 10

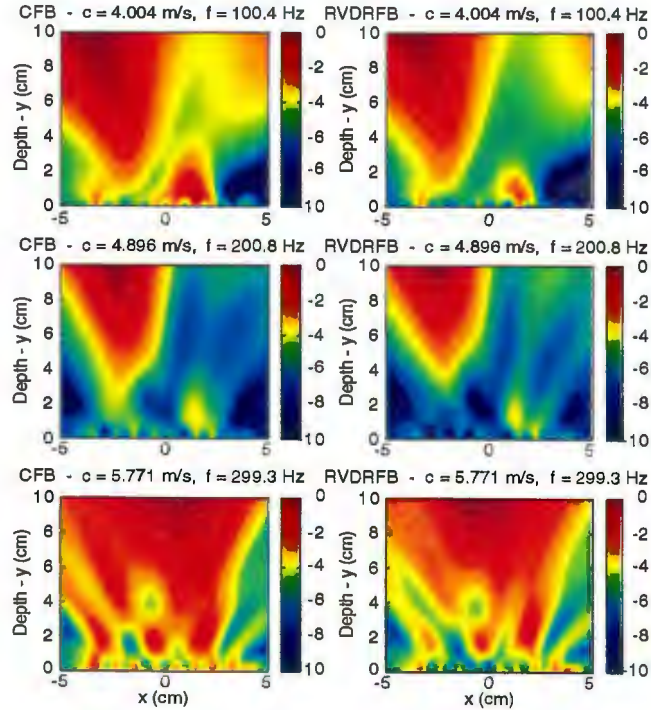


Figure A-91. Image of Data Set 916: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 916_16_1024.csd

Runname: 916_16_1024

Diastolic Phase

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 2.696

CFB Surface Maximum Location

X (cm): 0.7143 Y (cm): 10

RVDR Surface Normalization (dB): 0.7941

RVDR Surface Maximum Location

X (cm): -0.9184 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 2.669

CFB Surface Maximum Location

X (cm): -2.959 Y (cm): 10

RVDR Surface Normalization (dB): 0.8612

RVDR Surface Maximum Location

X (cm): -2.755 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 3.543

CFB Surface Maximum Location

X (cm): -0.7143 Y (cm): 10

RVDR Surface Normalization (dB): 1.25

RVDR Surface Maximum Location

X (cm): -0.9184 Y (cm): 10

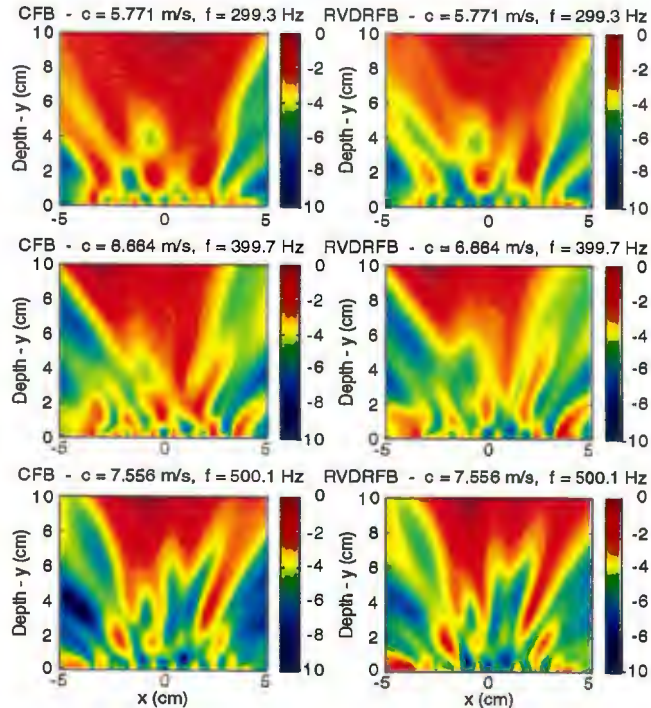


Figure A-92. Image of Data Set 916: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 916_32_512.csd
 Runname: 916_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 3.648
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 2.486
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.2
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 3.904
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.333
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.519
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

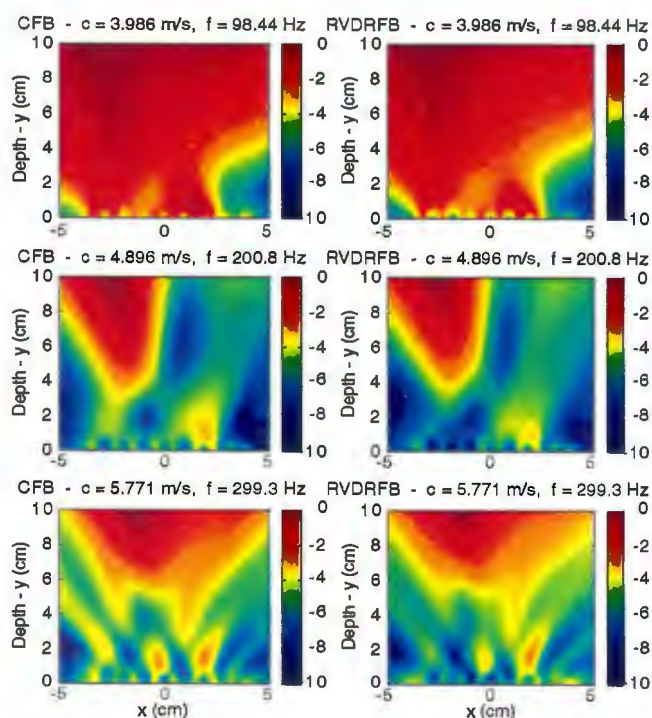


Figure A-93. Image of Data Set 916: 32 FFTs, 15 Channels Used at 100 Hz (Top) 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 916_32_512.csd
 Runname: 916_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.333
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.519
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.887
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.455
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.866
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9102
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

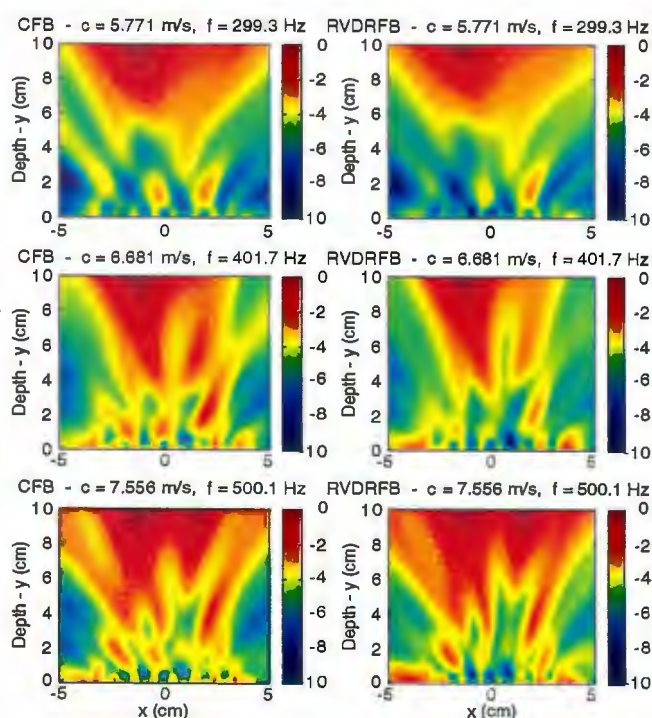


Figure A-94. Image of Data Set 916: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 916_64_256.csd
 Runname: 916_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.293
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 4.335
 RVDR Surface Maximum Location
 X (cm): -3.98 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.104
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 3.919
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.872
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.55
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

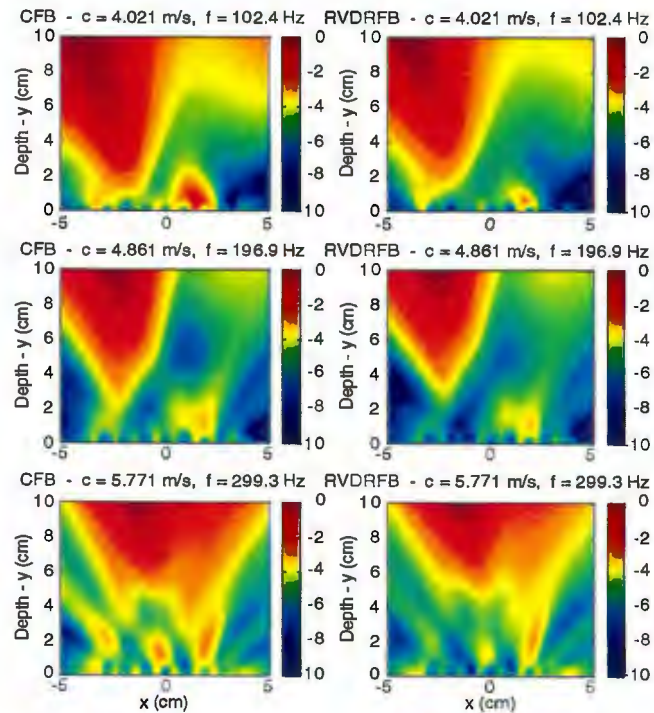


Figure A-95. Image of Data Set 916: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 916_64_256.csd
 Runname: 916_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.872
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.55
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.405
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.321
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.142
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.411
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

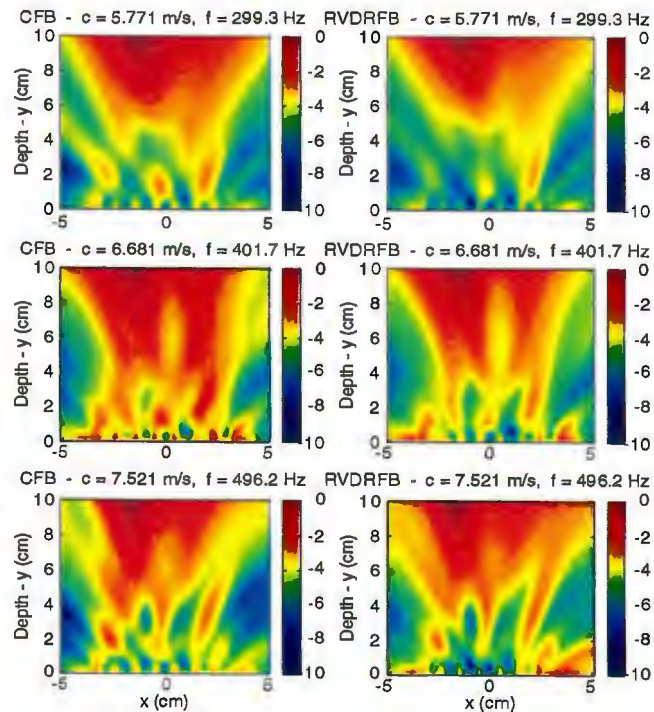


Figure A-96. Image of Data Set 916: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 917_16_1024.csd
 Runname: 917_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 3.864
 CFB Surface Maximum Location
 X (cm): 2.551 Y (cm): 1.514
 RVDR Surface Normalization (dB): 2.007
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.318
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 1.463
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 9.596

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.103
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.371
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

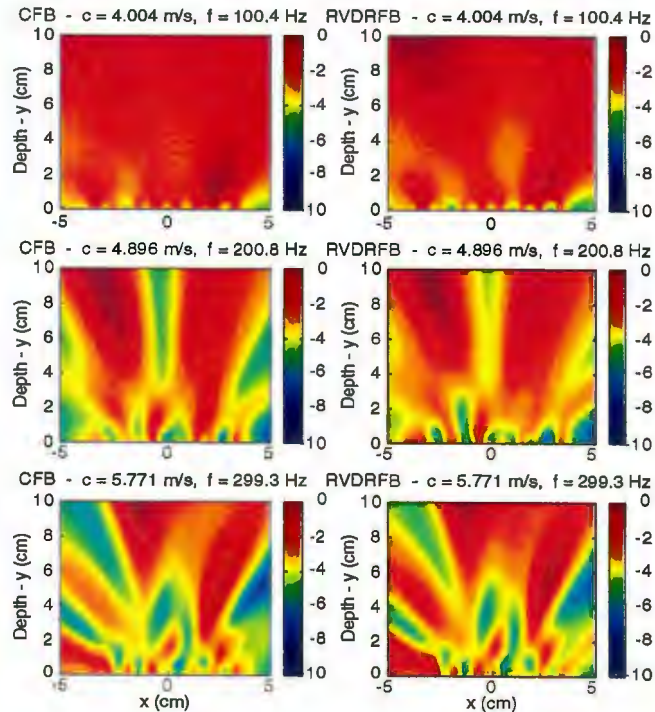


Figure A-97. Image of Data Set 917: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 917_16_1024.csd
 Runname: 917_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.103
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.371
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 1.49
 CFB Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1
 RVDR Surface Normalization (dB): -0.1246
 RVDR Surface Maximum Location
 X (cm): 3.163 Y (cm): 0.9082

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.237
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 2.322
 RVDR Surface Normalization (dB): -0.3906
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 2.322

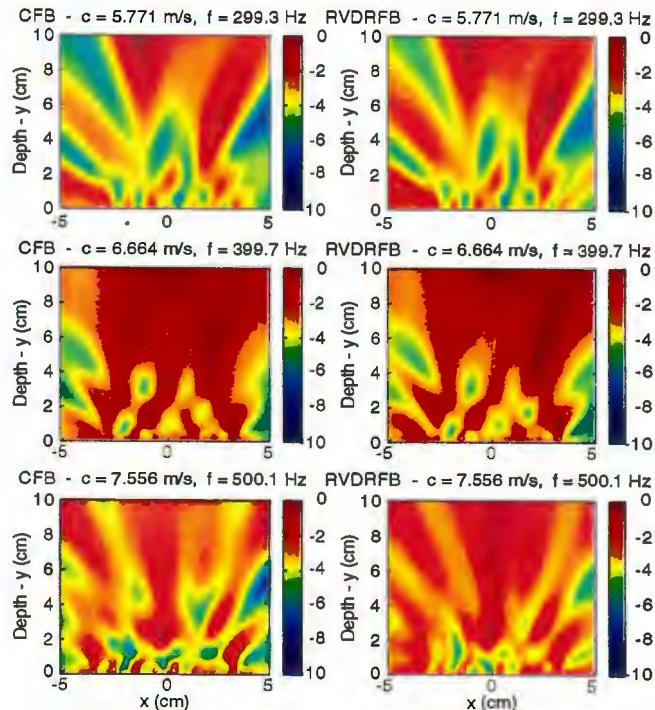


Figure A-98. Image of Data Set 917: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 917_32_512.csd
 Runname: 917_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.936
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.834
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 3.424
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.654
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 1.353
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.934
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.814
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

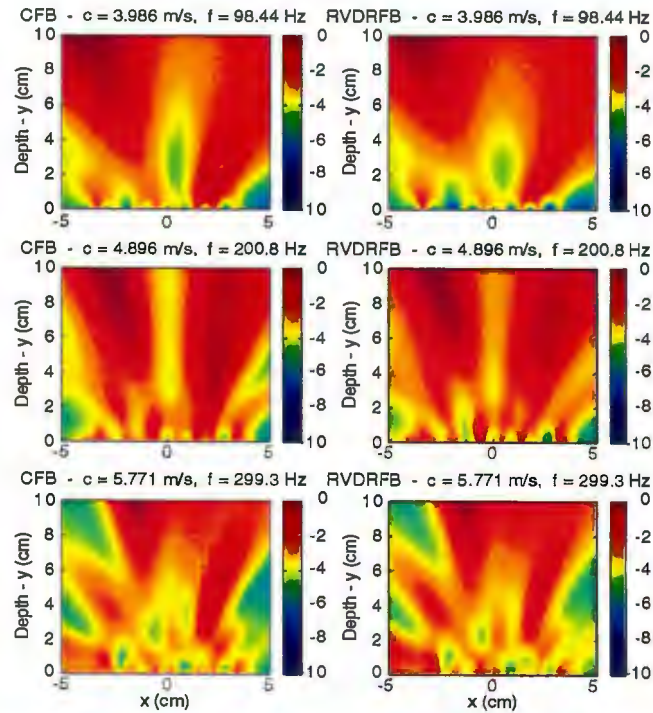


Figure A-99. Image of Data Set 917: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 917_32_512.csd
 Runname: 917_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.936
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.934
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.814
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.008
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 6.363
 RVDR Surface Normalization (dB): 0.5382
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 6.767

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.582
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.259
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

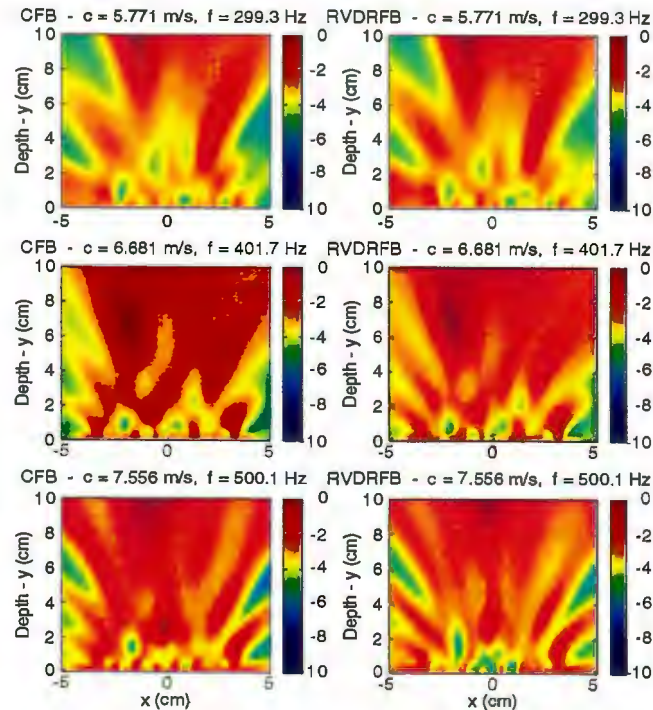


Figure A-100. Image of Data Set 917: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 917_64_256.csd
 Runname: 917_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 3.652
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 2.685
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.07
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 7.576
 RVDR Surface Normalization (dB): 1.865
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 8.99

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.08
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.357
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

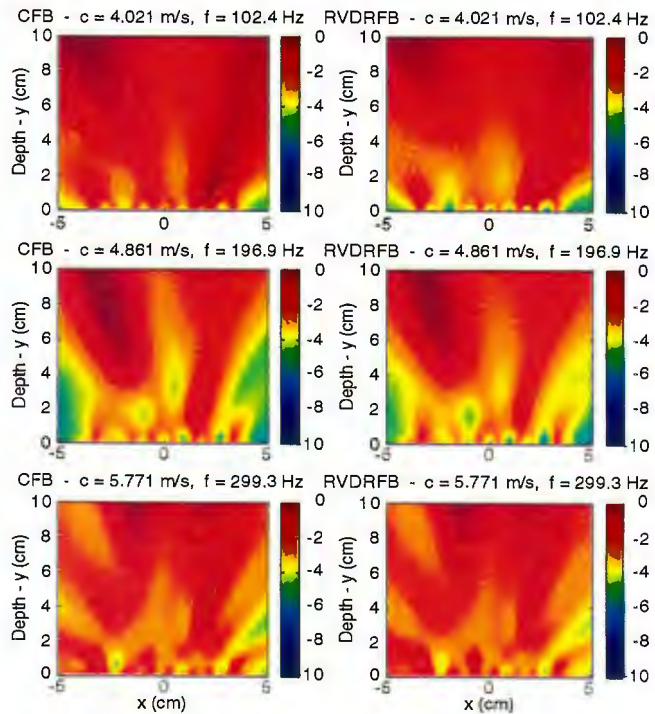


Figure A-101. Image of Data Set 917: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 917_64_256.csd
 Runname: 917_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.08
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.357
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.746
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 1.69
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.6
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.91
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

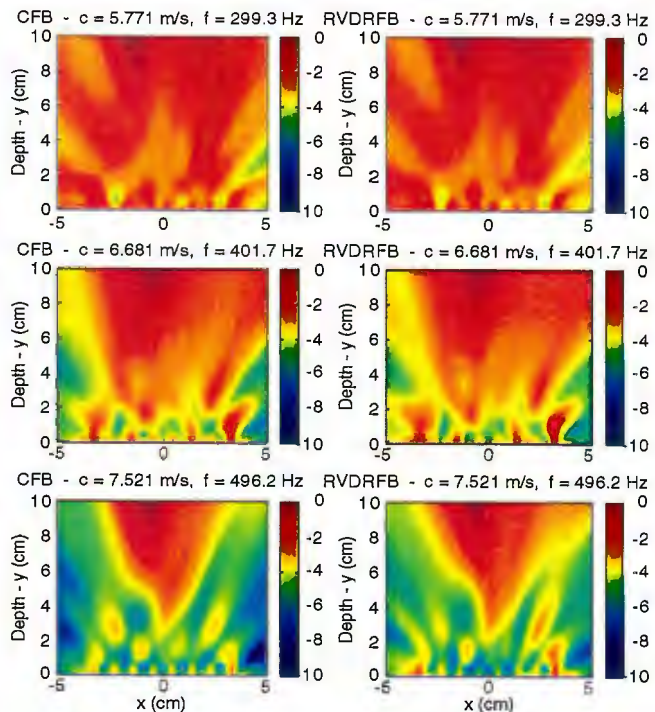


Figure A-102. Image of Data Set 917: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 918_16_1024.csd
 Runname: 918_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.624
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 4.851
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.572
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 4.343
 RVDR Surface Normalization (dB): 1.43
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 4.141

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.45
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 0.09786
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

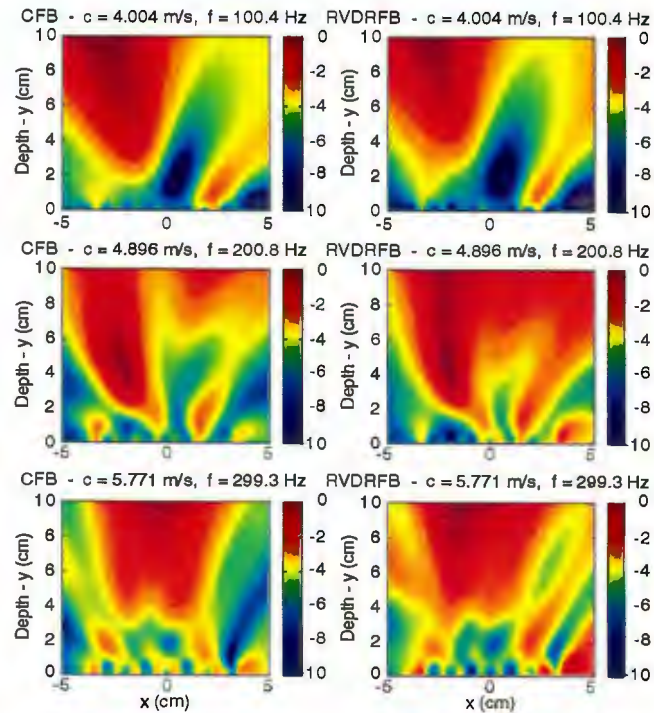


Figure A-103. Image of Data Set 918: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 918_16_1024.csd
 Runname: 918_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.45
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 0.09786
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.097
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.223
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.866
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 6.363
 RVDR Surface Normalization (dB): -0.34
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 7.373

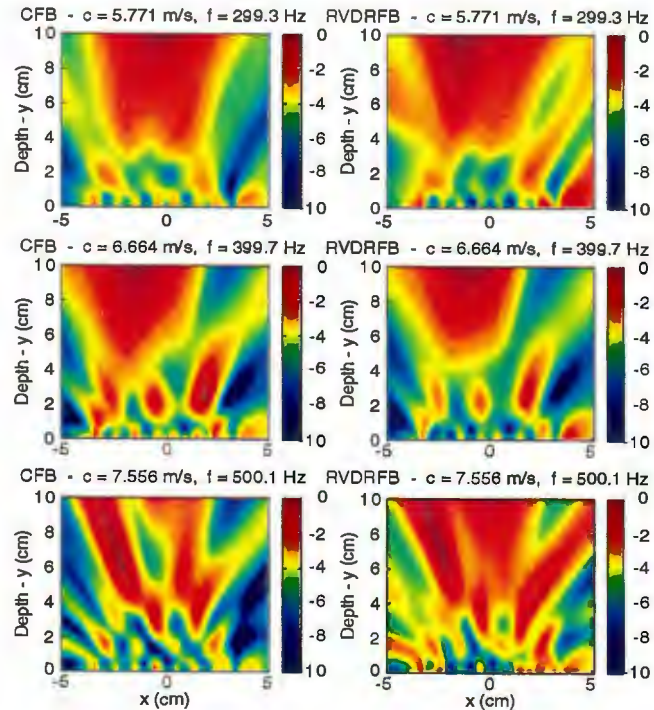


Figure A-104. Image of Data Set 918: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 918_32_512.csd
 Runname: 918_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.741
 CFB Surface Maximum Location
 X (cm): -3.571 Y (cm): 10
 RVDR Surface Normalization (dB): 4.41
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.568
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 4.343
 RVDR Surface Normalization (dB): 1.692
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.794
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): -0.08237
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

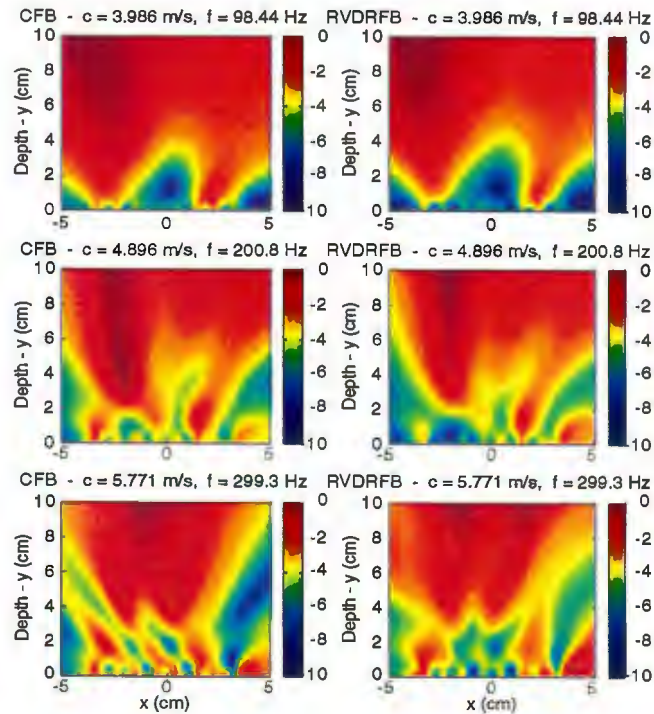


Figure A-105. Image of Data Set 918: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 918_32_512.csd
 Runname: 918_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.794
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): -0.08237
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.77
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.463
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.588
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 6.363
 RVDR Surface Normalization (dB): 0.2334
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

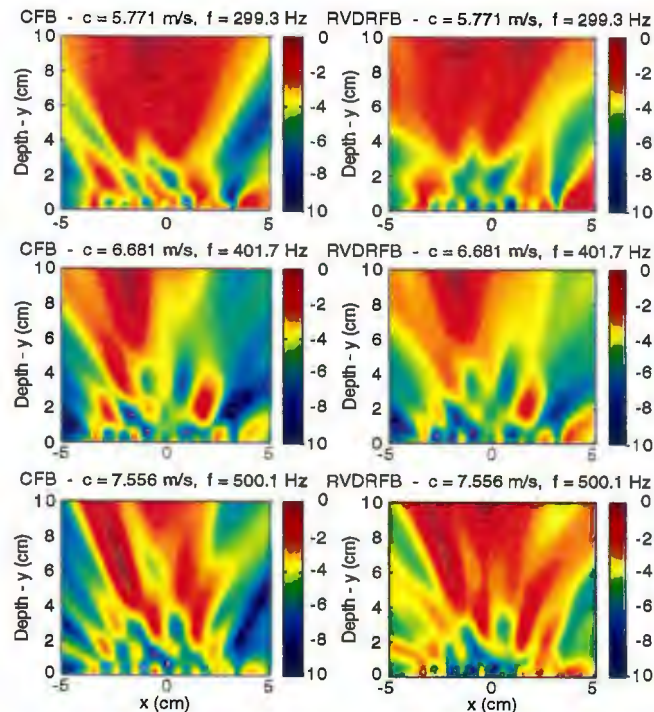


Figure A-106. Image of Data Set 918: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 918_64_256.csd
 Runname: 918_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.74
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 4.53
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.017
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.46
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.068
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9914
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

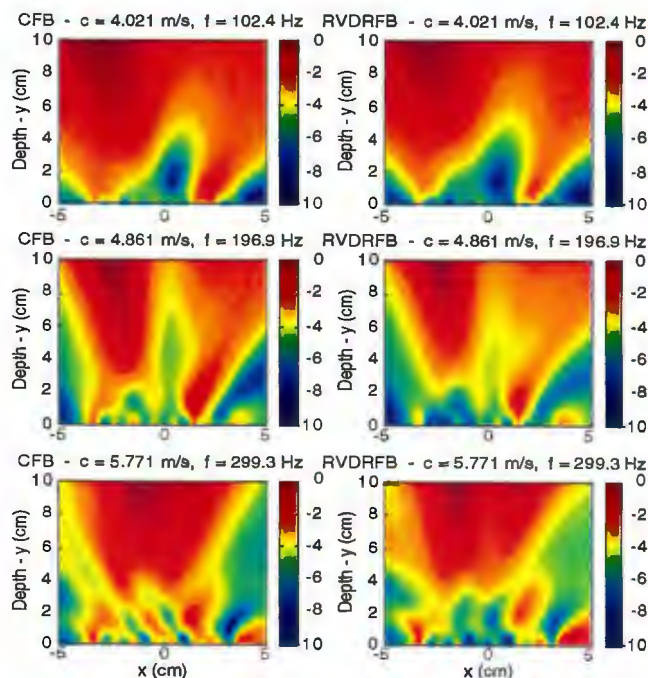


Figure A-107. Image of Data Set 918: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 918_64_256.csd
 Runname: 918_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.068
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9914
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.742
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.94
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.669
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 0.676
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

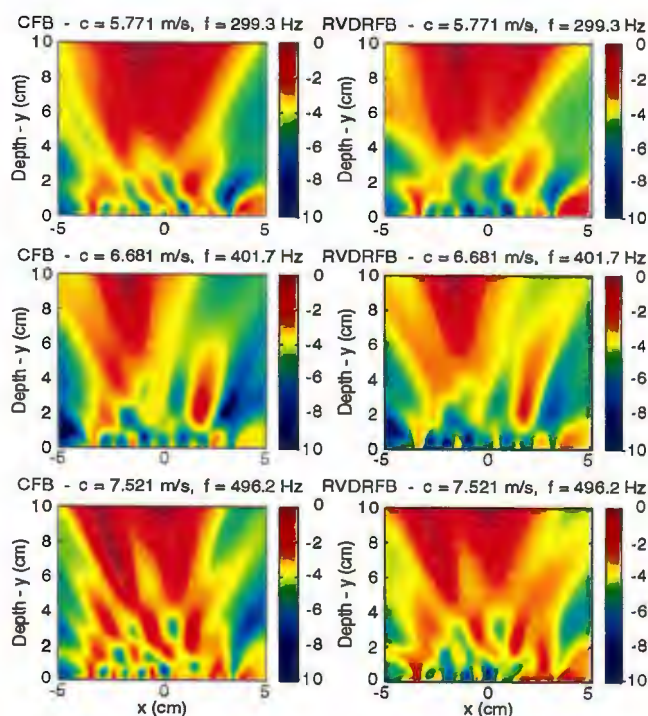


Figure A-108. Image of Data Set 918: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 919_16_1024.csd
 Runname: 919_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 8

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.315
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 4.343
 RVDR Surface Normalization (dB): 3.854
 RVDR Surface Maximum Location
 X (cm): -3.98 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.23
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 1.662
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.665
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.031
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 8.788

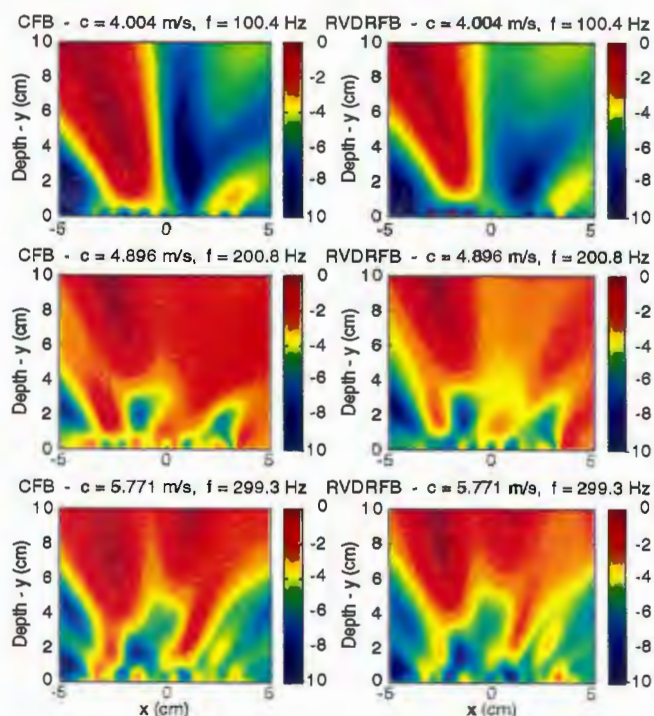


Figure A-109. Image of Data Set 919: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 919_16_1024.csd
 Runname: 919_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.665
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.031
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 8.788

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.286
 CFB Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 0.69
 RVDR Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.248
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 4.747
 RVDR Surface Normalization (dB): 0.8179
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

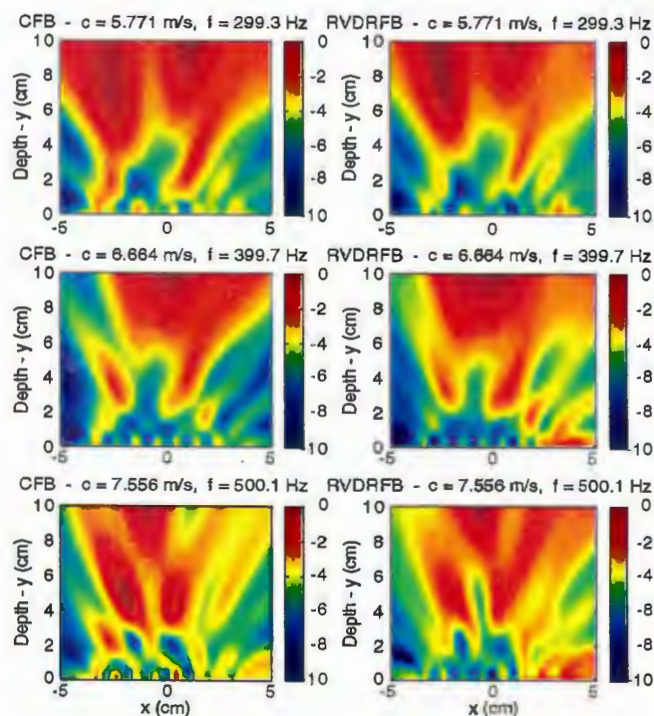


Figure A-110. Image of Data Set 919: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 919_32_512.csd
 Runname: 919_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.225
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 3.333
 RVDR Surface Normalization (dB): 3.617
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 4.545

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.28
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 7.778
 RVDR Surface Normalization (dB): 1.907
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 9.798

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.348
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.463
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

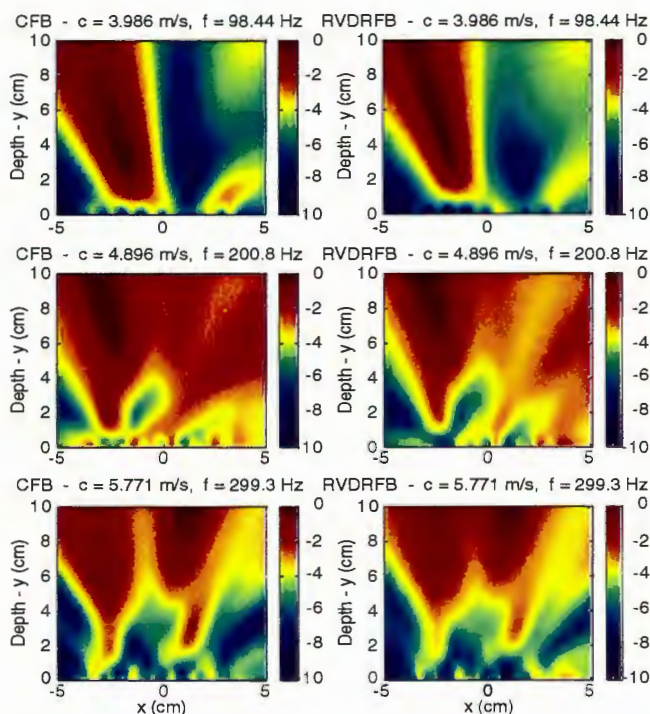


Figure A-111. Image of Data Set 919: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 919_32_512.csd
 Runname: 919_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.348
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.463
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.122
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.019
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.281
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.213
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

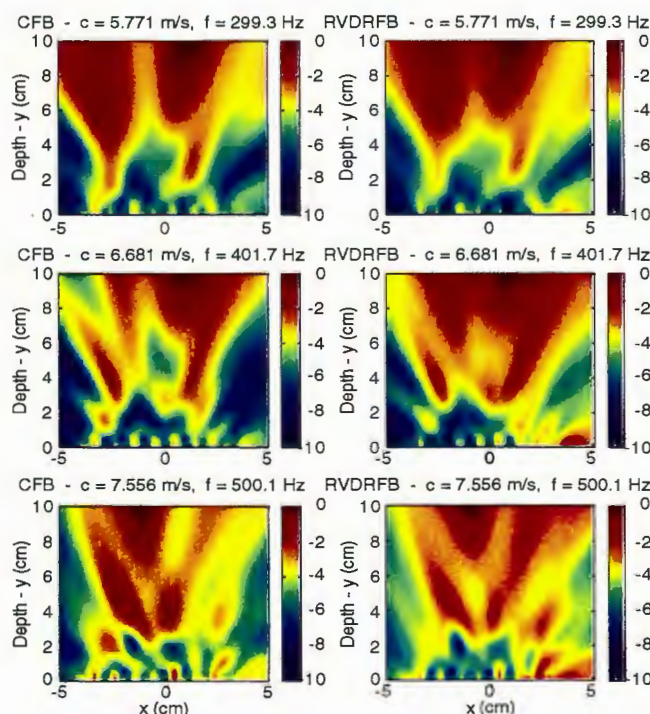


Figure A-112. Image of Data Set 919: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 919_64_256.csd
 Runname: 919_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.878
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.079
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 3.131
 RVDR Surface Normalization (dB): 4.297
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 4.343

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.842
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 8.586
 RVDR Surface Normalization (dB): 2.347
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 8.99

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.225
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.081
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

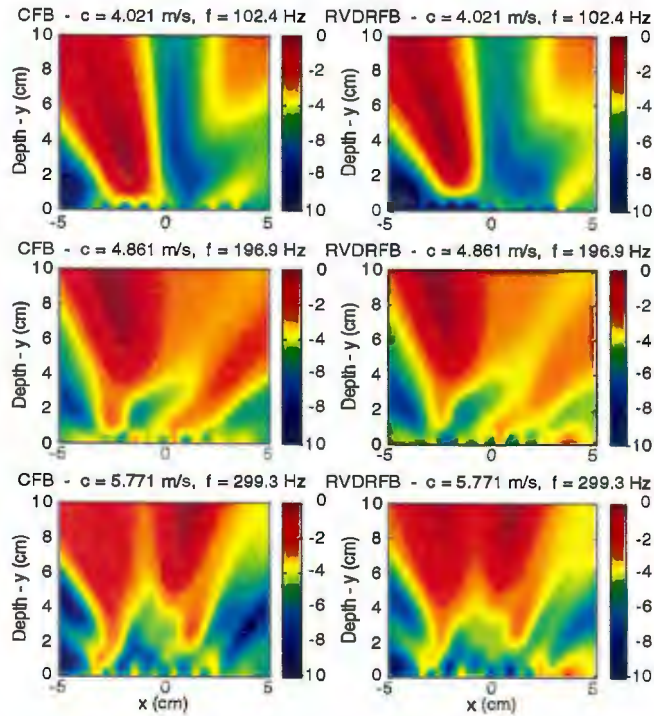


Figure A-113. Image of Data Set 919: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 919_64_256.csd
 Runname: 919_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.225
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.081
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.126
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.976
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.433
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.585
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

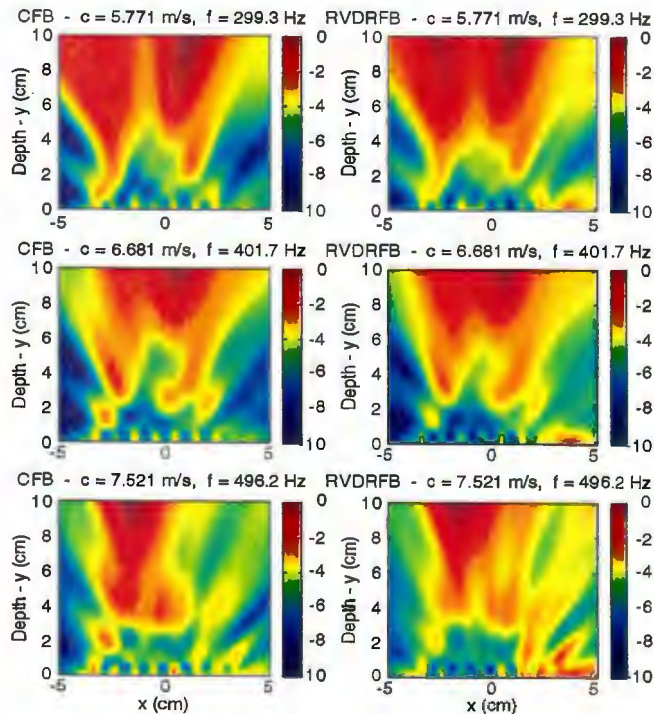


Figure A-114. Image of Data Set 919: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 920_16_1024.csd
 Runname: 920_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.21
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 3.737
 RVDR Surface Normalization (dB): 4.687
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 4.747

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.922
 CFB Surface Maximum Location
 X (cm): 4.184 Y (cm): 7.171
 RVDR Surface Normalization (dB): 1.241
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.942
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6287
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

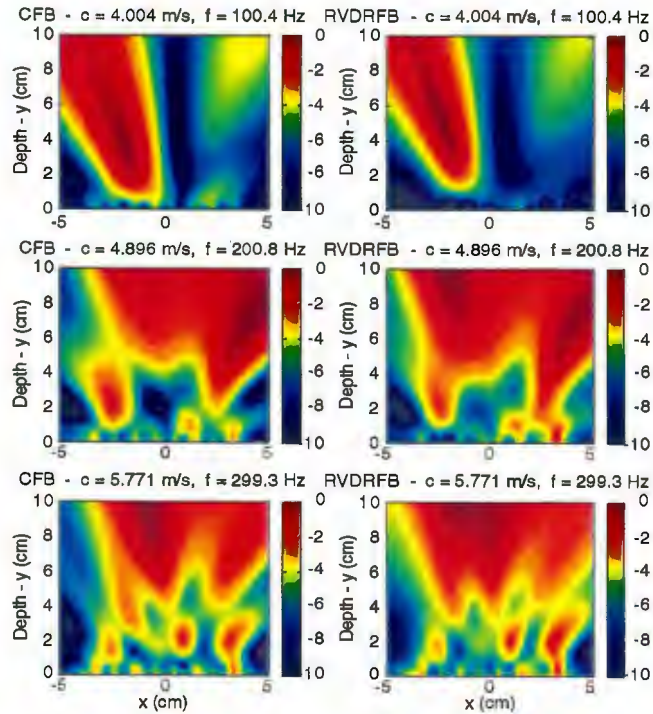


Figure A-115. Image of Data Set 920: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 920_16_1024.csd
 Runname: 920_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.942
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6287
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.205
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.8761
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.453
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 0.8001
 RVDR Surface Maximum Location
 X (cm): 0.102 Y (cm): 10

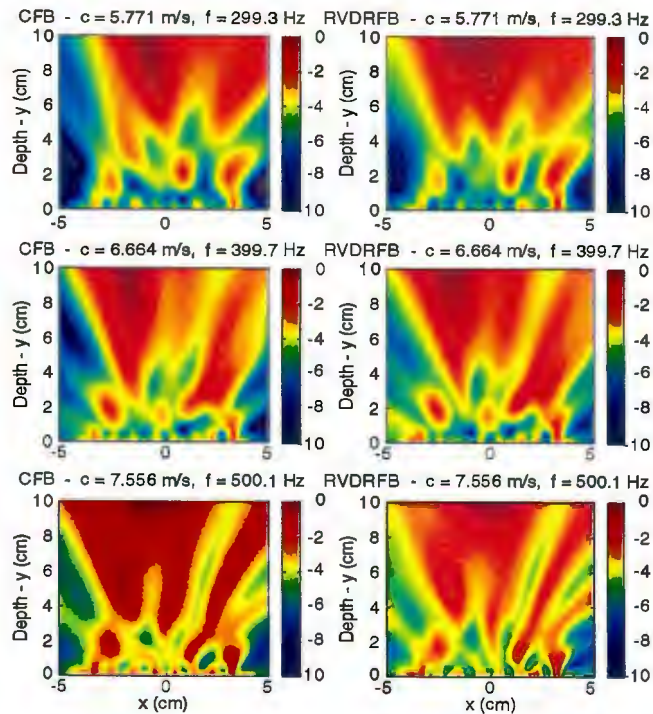


Figure A-116. Image of Data Set 920: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 920_32_512.csd
 Runname: 920_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.066
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 4.545
 RVDR Surface Normalization (dB): 5.102
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 5.757

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.812
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.263
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.226
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.077
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

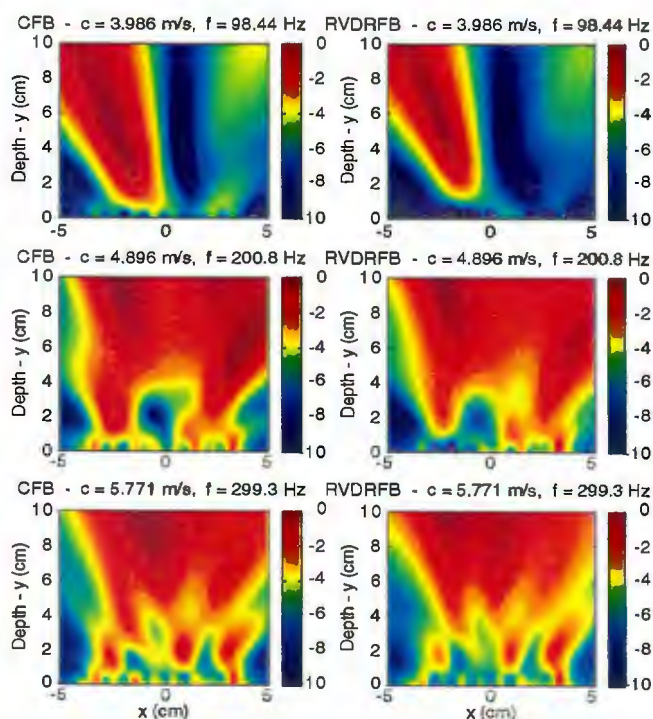


Figure A-117. Image of Data Set 920: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 920_32_512.csd
 Runname: 920_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.226
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.077
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.364
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 9.798
 RVDR Surface Normalization (dB): 0.9618
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.545
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.7665
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

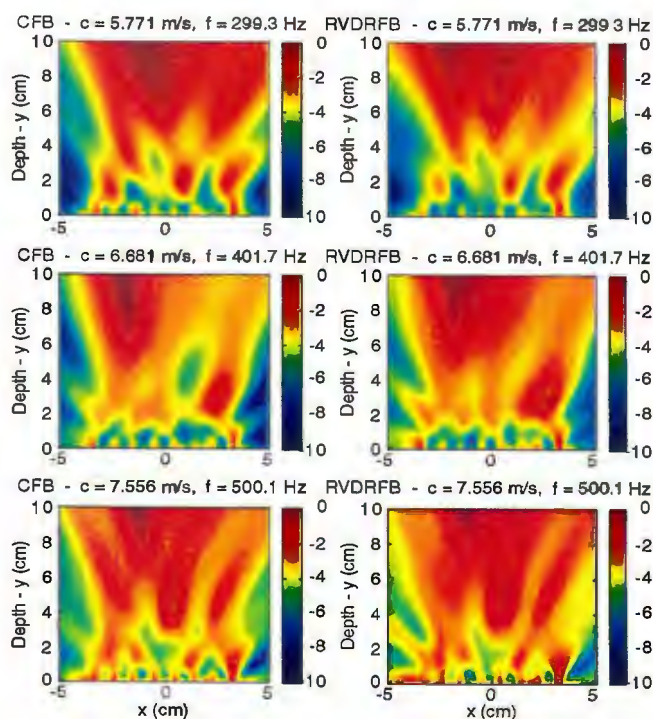


Figure A-118. Image of Data Set 920: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 920_64_256.csd
 Runname: 920_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.895
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 3.939
 RVDR Surface Normalization (dB): 3.725
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.151

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.999
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 1.011
 RVDR Surface Maximum Location
 X (cm): 2.959 Y (cm): 2.12

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.116
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.28
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

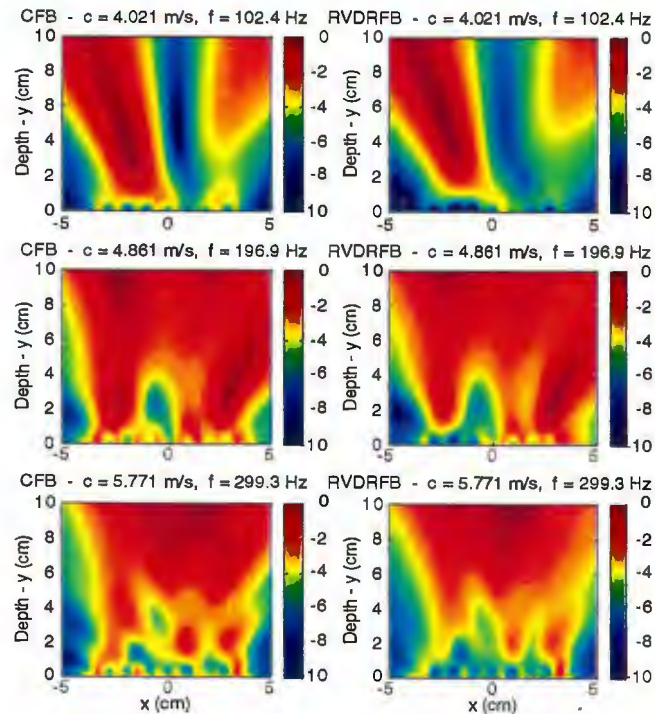


Figure A-119. Image of Data Set 920: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 920_64_256.csd
 Runname: 920_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.116
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.28
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.346
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.534
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.455
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.251
 RVDR Surface Maximum Location
 X (cm): 3.367 Y (cm): 0.1

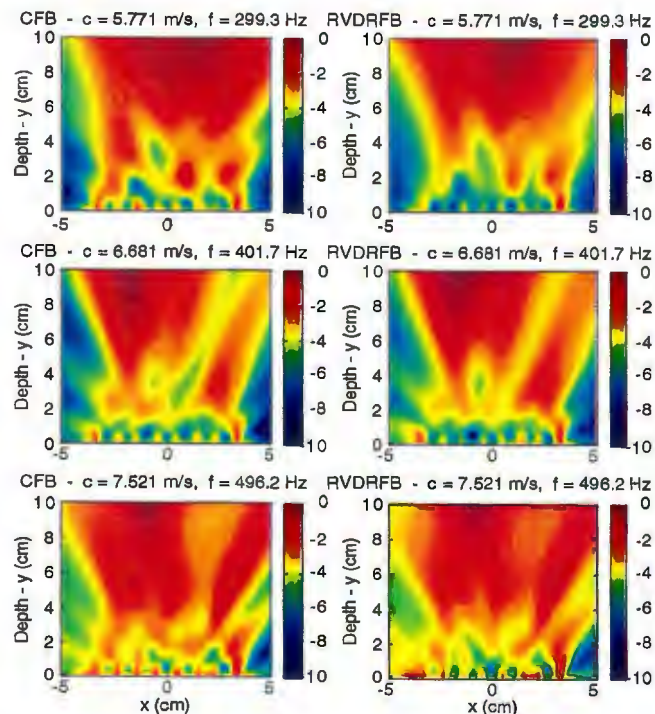


Figure A-120. Image of Data Set 920: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 921_16_1024.csd

Runname: 921_16_1024

Diastolic Phase

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 7.266

CFB Surface Maximum Location

X (cm): -3.776 Y (cm): 8.788

RVDR Surface Normalization (dB): 5.406

RVDR Surface Maximum Location

X (cm): -4.388 Y (cm): 10

Frequency 200 Hz

CFB Surface Normalization (dB): 4.823

CFB Surface Maximum Location

X (cm): -2.755 Y (cm): 10

RVDR Surface Normalization (dB): 3.232

RVDR Surface Maximum Location

X (cm): -2.551 Y (cm): 10

Frequency 300 Hz

CFB Surface Normalization (dB): 3.854

CFB Surface Maximum Location

X (cm): 2.143 Y (cm): 4.747

RVDR Surface Normalization (dB): 1.652

RVDR Surface Maximum Location

X (cm): -2.551 Y (cm): 10

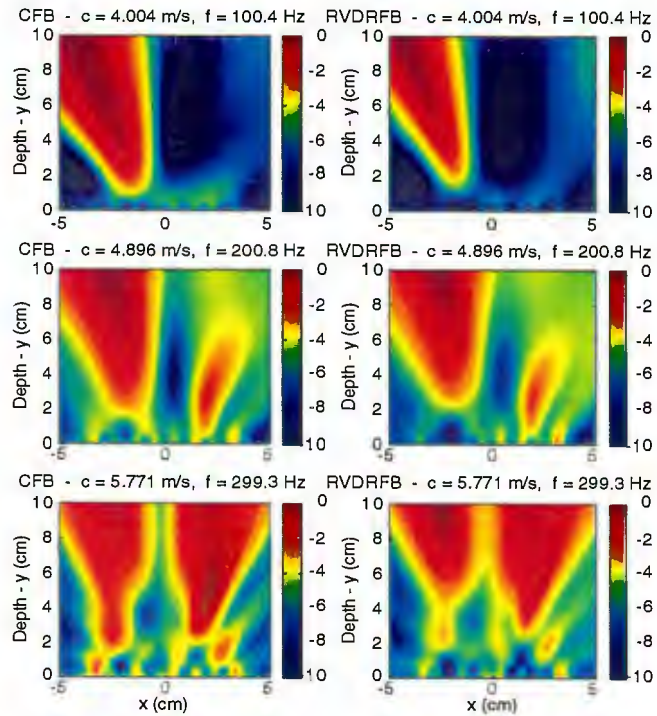


Figure A-121. Image of Data Set 921: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 921_16_1024.csd

Runname: 921_16_1024

Diastolic Phase

Spreading Parameter = 1

15 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 3.854

CFB Surface Maximum Location

X (cm): 2.143 Y (cm): 4.747

RVDR Surface Normalization (dB): 1.652

RVDR Surface Maximum Location

X (cm): -2.551 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 3.965

CFB Surface Maximum Location

X (cm): -1.531 Y (cm): 10

RVDR Surface Normalization (dB): 1.407

RVDR Surface Maximum Location

X (cm): -1.327 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 2.289

CFB Surface Maximum Location

X (cm): -1.735 Y (cm): 8.182

RVDR Surface Normalization (dB): 0.7536

RVDR Surface Maximum Location

X (cm): -0.3061 Y (cm): 10

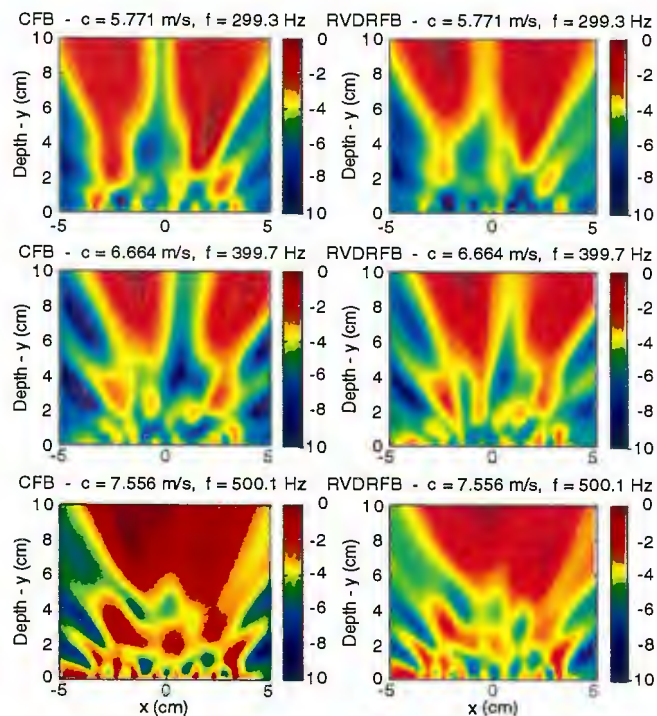


Figure A-122. Image of Data Set 921: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 921_32_512.csd
 Runname: 921_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.473
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 3.131
 RVDR Surface Normalization (dB): 2.741
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 4.343

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.328
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 7.373
 RVDR Surface Normalization (dB): 2.8
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 8.182

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.682
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.893
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

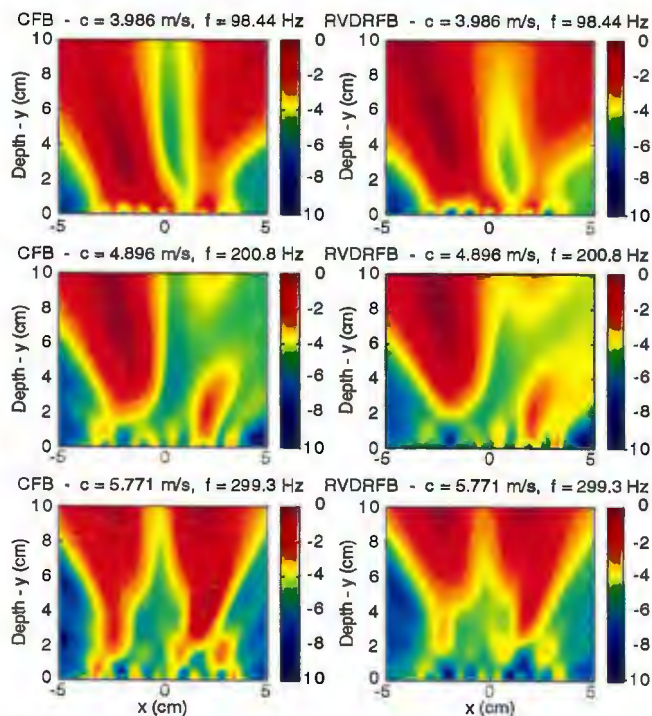


Figure A-123. Image of Data Set 921: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 921_32_512.csd
 Runname: 921_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.682
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.893
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.048
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.932
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.645
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.057
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

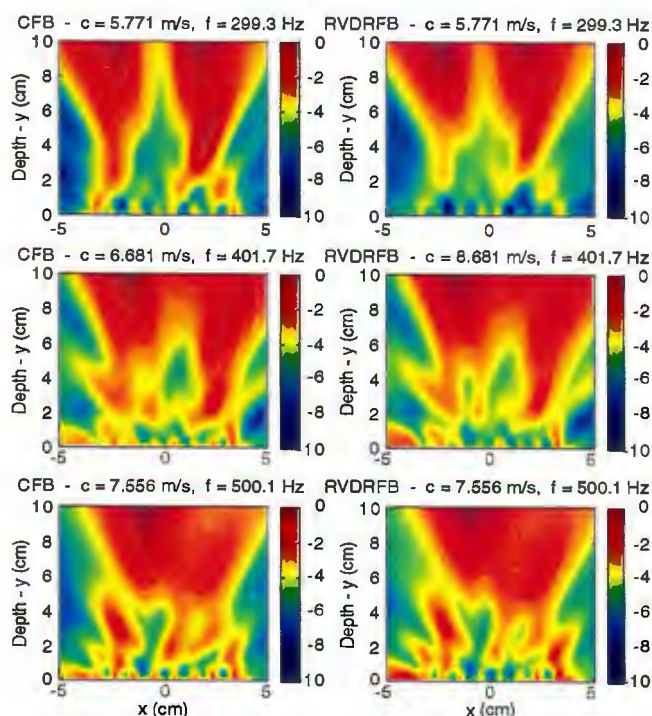


Figure A-124. Image of Data Set 921: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 921_64_256.csd
 Runname: 921_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.461
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 4.141
 RVDR Surface Normalization (dB): 4.129
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 5.555

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.467
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 6.363
 RVDR Surface Normalization (dB): 2.842
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 6.565

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.861
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.877
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

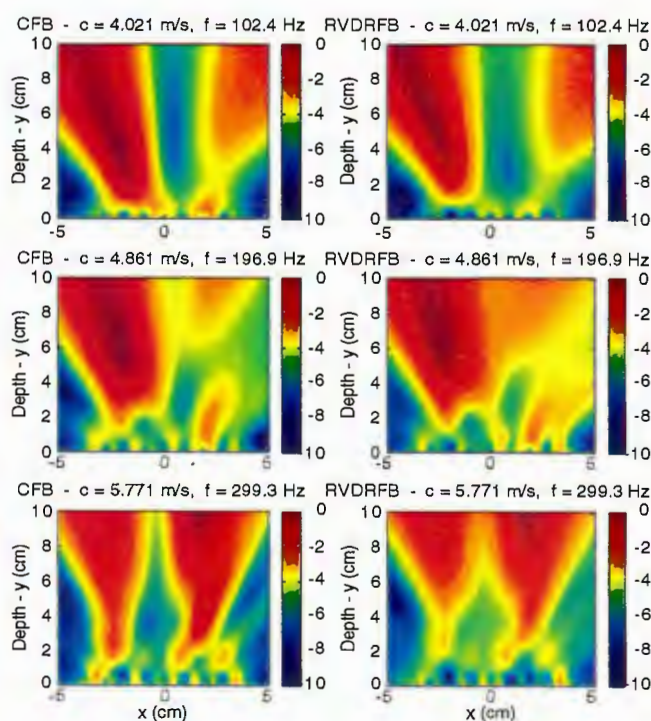


Figure A-125. Image of Data Set 921: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 921_64_256.csd
 Runname: 921_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.861
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.877
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.104
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.892
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.658
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.51
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

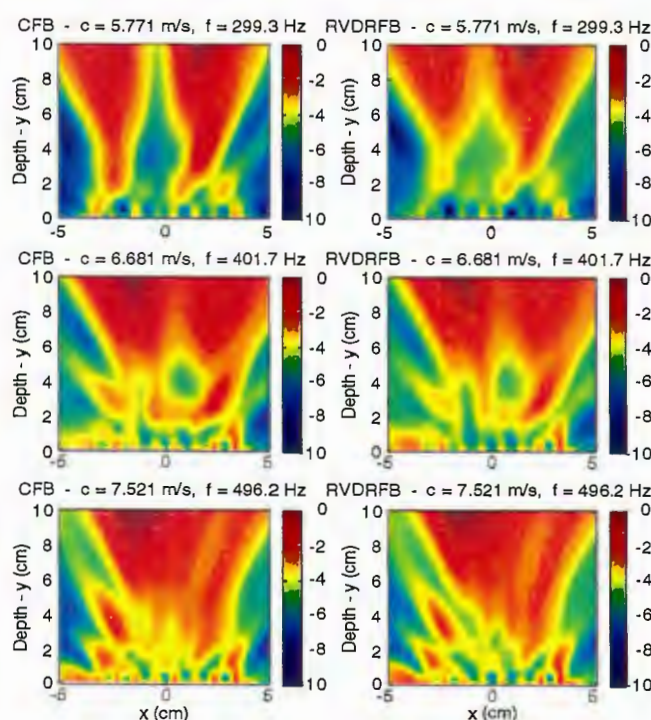


Figure A-126. Image of Data Set 921: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 922_16_1024.csd
 Runname: 922_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.273
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 6.969
 RVDR Surface Normalization (dB): 5.102
 RVDR Surface Maximum Location
 X (cm): -4.184 Y (cm): 9.798

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.073
 CFB Surface Maximum Location
 X (cm): 3.98 Y (cm): 5.555
 RVDR Surface Normalization (dB): 1.922
 RVDR Surface Maximum Location
 X (cm): 4.388 Y (cm): 6.363

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.55
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 4.141
 RVDR Surface Normalization (dB): 1.061
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 3.737

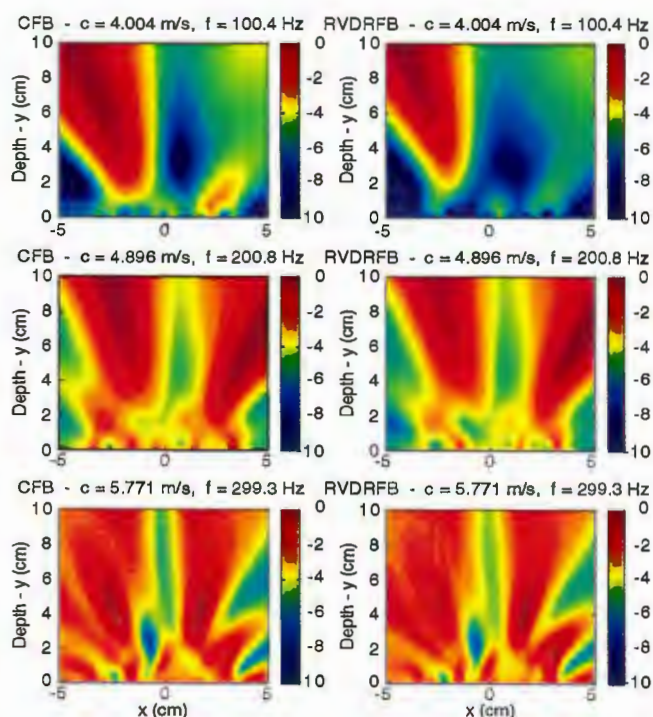


Figure A-127. Image of Data Set 922: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 922_16_1024.csd
 Runname: 922_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.55
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 4.141
 RVDR Surface Normalization (dB): 1.061
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 3.737

Frequency 400 Hz
 CFB Surface Normalization (dB): 1.978
 CFB Surface Maximum Location
 X (cm): 0.3061 Y (cm): 2.524
 RVDR Surface Normalization (dB): 0.476
 RVDR Surface Maximum Location
 X (cm): 0.3061 Y (cm): 2.727

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.512
 CFB Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 1.107
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

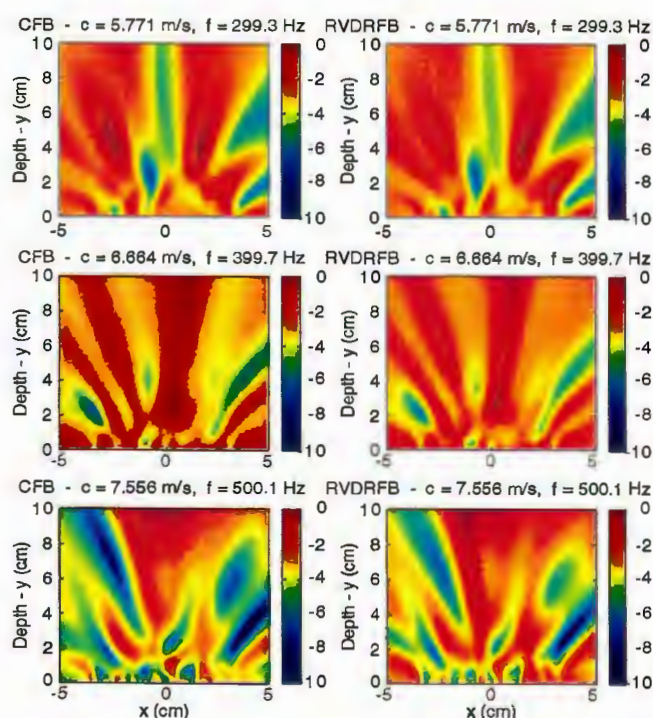


Figure A-128. Image of Data Set 922: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 922_32_512.csd
 Runname: 922_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.117
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 7.373
 RVDR Surface Normalization (dB): 3.422
 RVDR Surface Maximum Location
 X (cm): -3.571 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.129
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 2.235
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.612
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 3.939
 RVDR Surface Normalization (dB): 0.2596
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 3.939

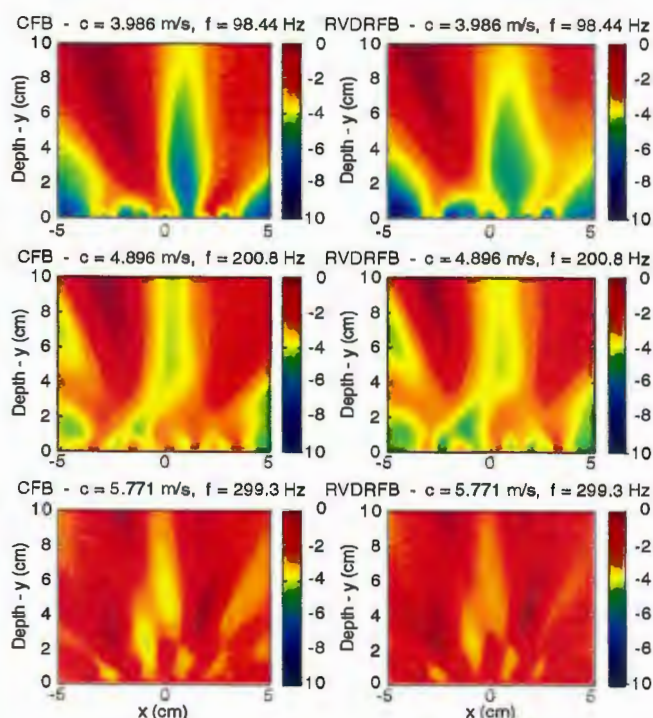


Figure A-129. Image of Data Set 922: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 922_32_512.csd
 Runname: 922_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.612
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 3.939
 RVDR Surface Normalization (dB): 0.2596
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 3.939

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.95
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.108
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.323
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.159
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

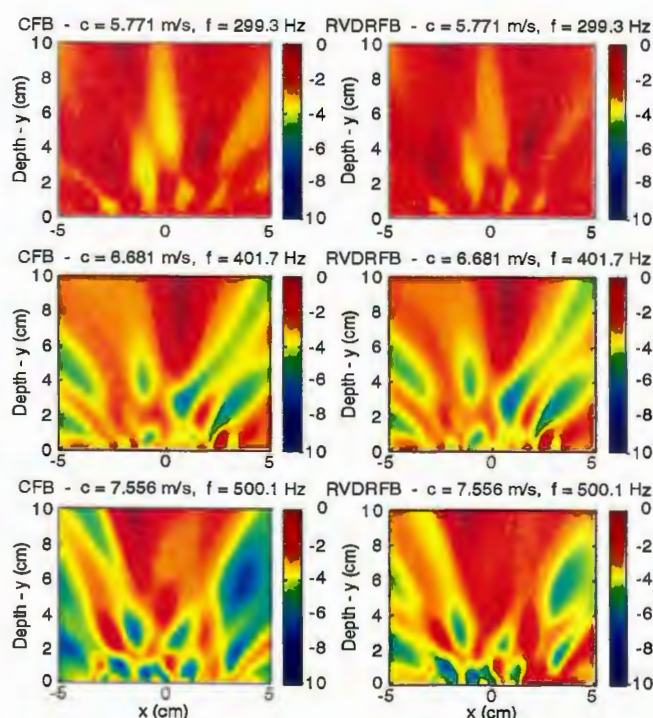


Figure A-130. Image of Data Set 922: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 922_64_256.csd
 Runname: 922_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.055
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 6.161
 RVDR Surface Normalization (dB): 4.006
 RVDR Surface Maximum Location
 X (cm): -4.184 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.045
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 8.788
 RVDR Surface Normalization (dB): 1.265
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.858
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.1
 RVDR Surface Normalization (dB): 0.8094
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.1

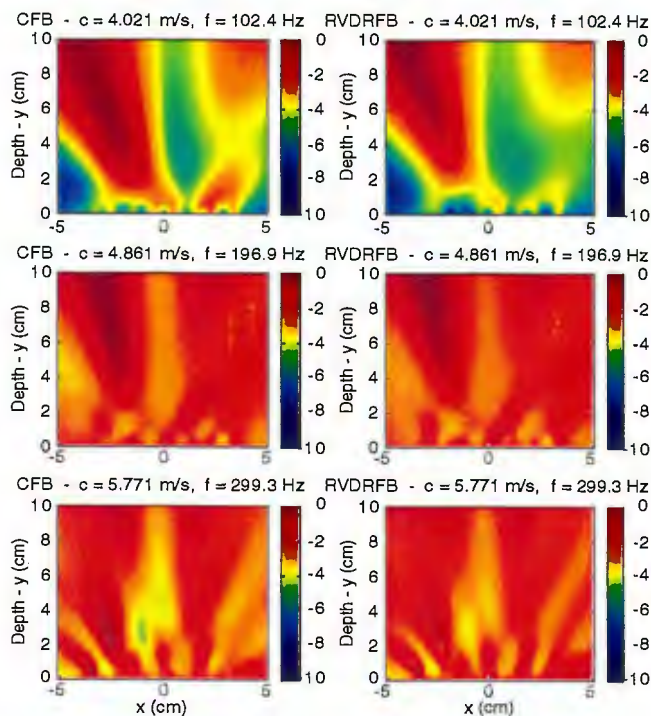


Figure A-131. Image of Data Set 922: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 922_64_256.csd
 Runname: 922_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 1.858
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.1
 RVDR Surface Normalization (dB): 0.8094
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.1

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.028
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.011
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.36
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.042
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

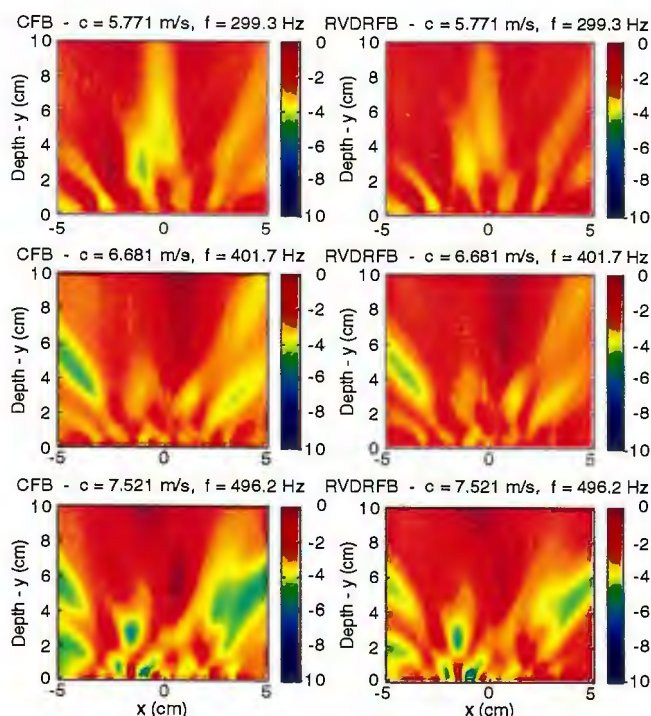


Figure A-132. Image of Data Set 922: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 923_16_1024.csd
 Runname: 923_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.16
 CFB Surface Maximum Location
 X (cm): 4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 3.831
 RVDR Surface Maximum Location
 X (cm): 4.388 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.641
 CFB Surface Maximum Location
 X (cm): 3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 1.219
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.247
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.009
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

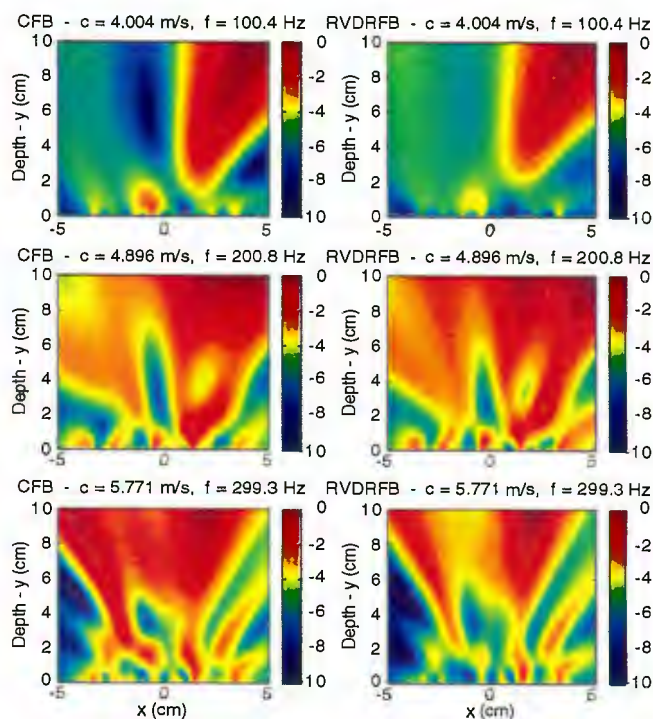


Figure A-133. Image of Data Set 923: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 923_16_1024.csd
 Runname: 923_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.247
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.009
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.62
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 4.141
 RVDR Surface Normalization (dB): 0.3219
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 4.141

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.038
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 4.949
 RVDR Surface Normalization (dB): 0.7995
 RVDR Surface Maximum Location
 X (cm): 3.163 Y (cm): 1.514

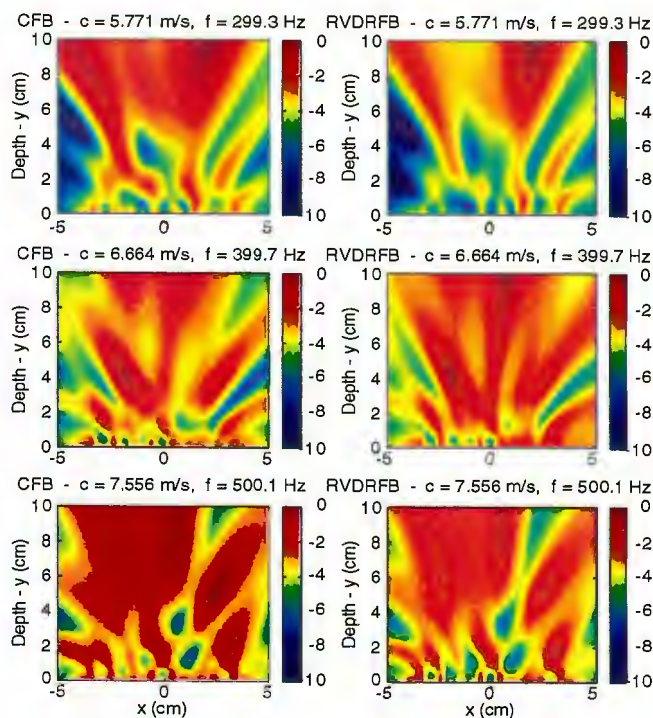


Figure A-134. Image of Data Set 923: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 923_32_512.csd
 Runname: 923_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.717
 CFB Surface Maximum Location
 X (cm): 4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 5.41
 RVDR Surface Maximum Location
 X (cm): 4.184 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.598
 CFB Surface Maximum Location
 X (cm): 4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.688
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.545
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.9
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

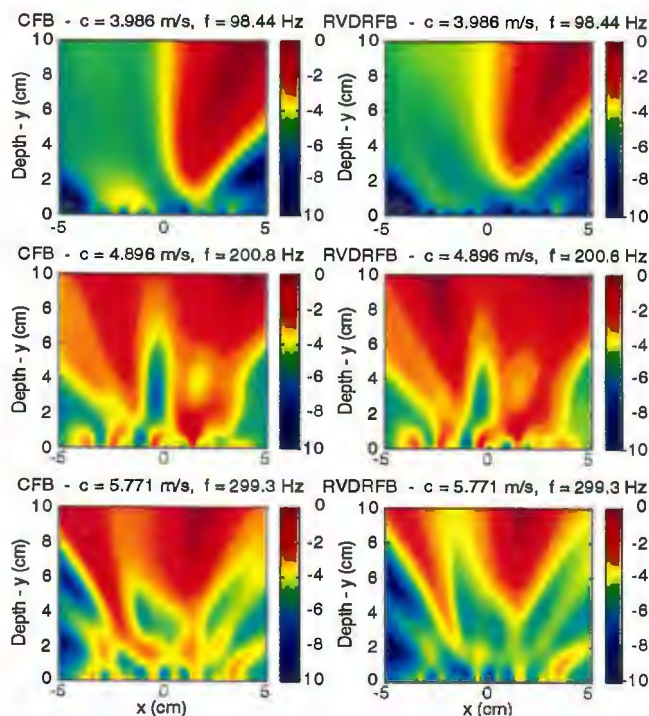


Figure A-135. Image of Data Set 923: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 923_32_512.csd
 Runname: 923_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.545
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.9
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.751
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.039
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.731
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 0.782
 RVDR Surface Maximum Location
 X (cm): 3.163 Y (cm): 1.312

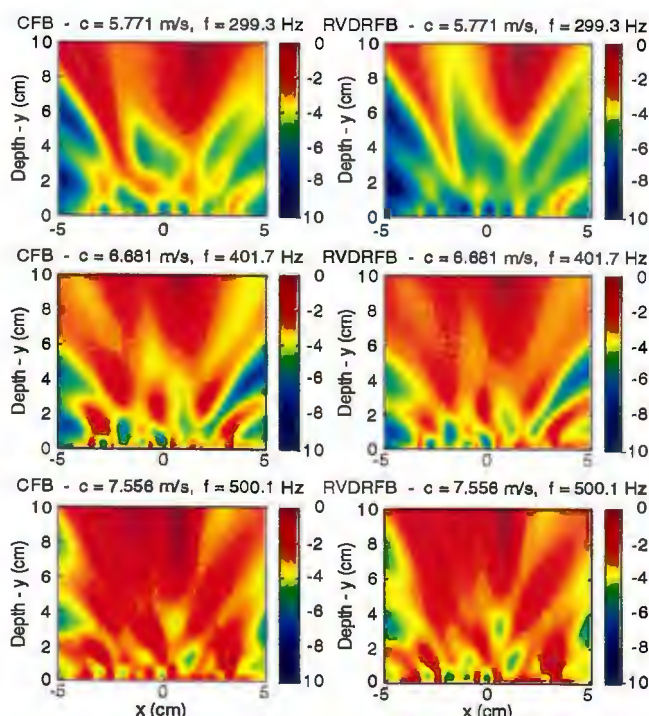


Figure A-136. Image of Data Set 923: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 923_64_256.csd
 Runname: 923_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.871
 CFB Surface Maximum Location
 X (cm): 4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 3.468
 RVDR Surface Maximum Location
 X (cm): 4.388 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.878
 CFB Surface Maximum Location
 X (cm): 4.592 Y (cm): 10
 RVDR Surface Normalization (dB): 2.041
 RVDR Surface Maximum Location
 X (cm): 4.796 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.736
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.604
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

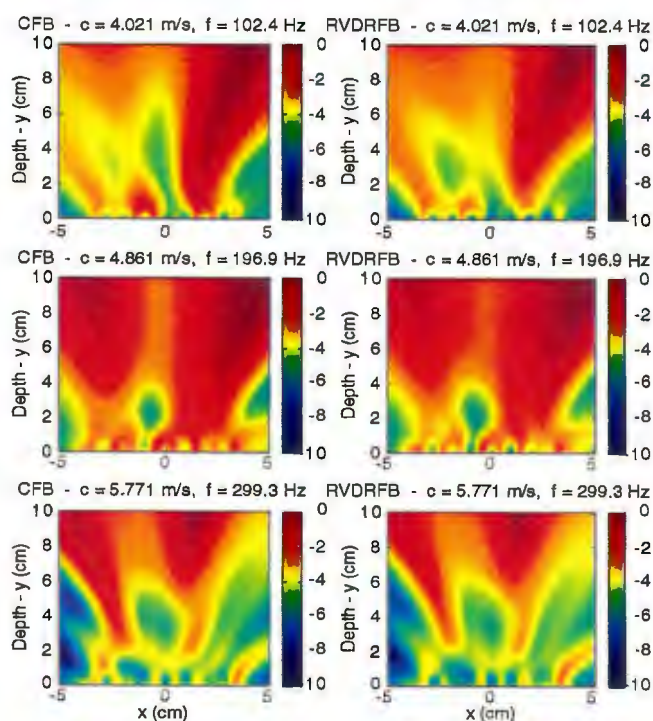


Figure A-137. Image of Data Set 923: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 923_64_256.csd
 Runname: 923_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.736
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.604
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.413
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 1.722
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.881
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.46
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

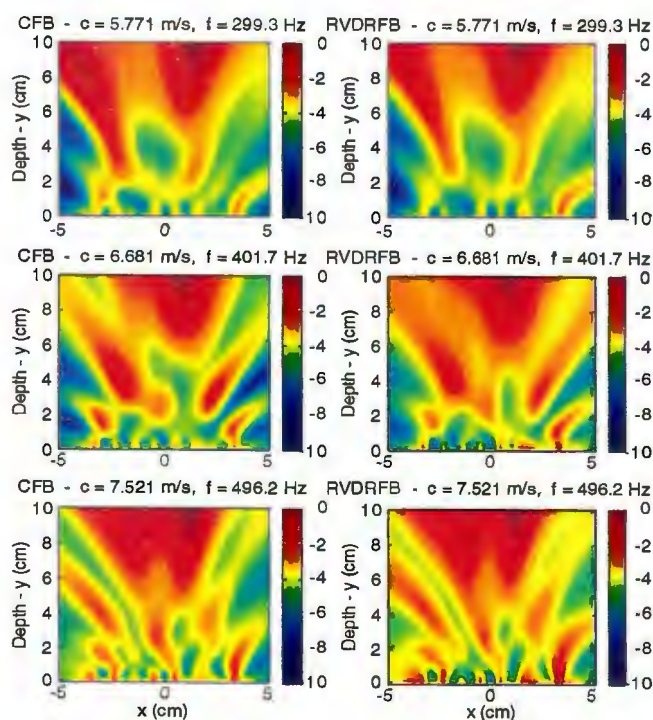


Figure A-138. Image of Data Set 923: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 924_16_1024.csd
 Runname: 924_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.869
 CFB Surface Maximum Location
 X (cm): 3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 3.896
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.328
 CFB Surface Maximum Location
 X (cm): 2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 1.035
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.407
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 5.353
 RVDR Surface Normalization (dB): 2.061
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

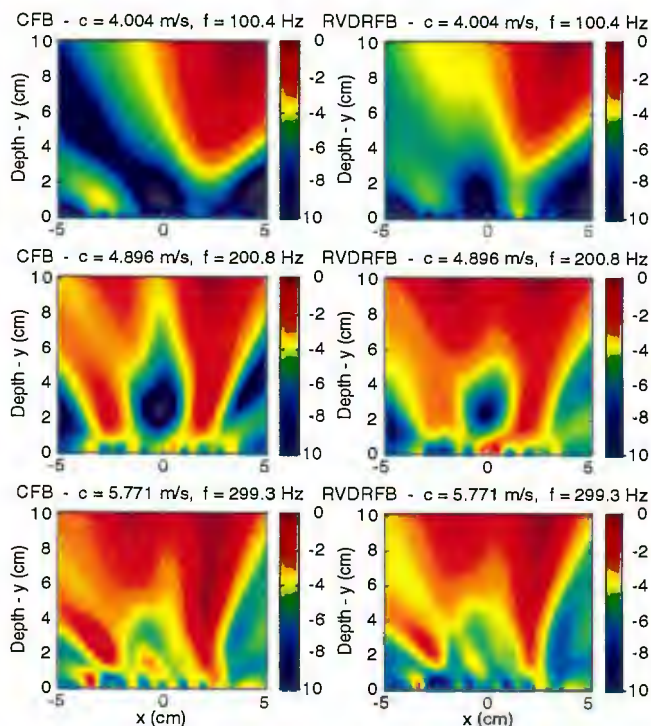


Figure A-139. Image of Data Set 924: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 924_16_1024.csd
 Runname: 924_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.407
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 5.353
 RVDR Surface Normalization (dB): 2.061
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.528
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 0.7264
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.099
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6487
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

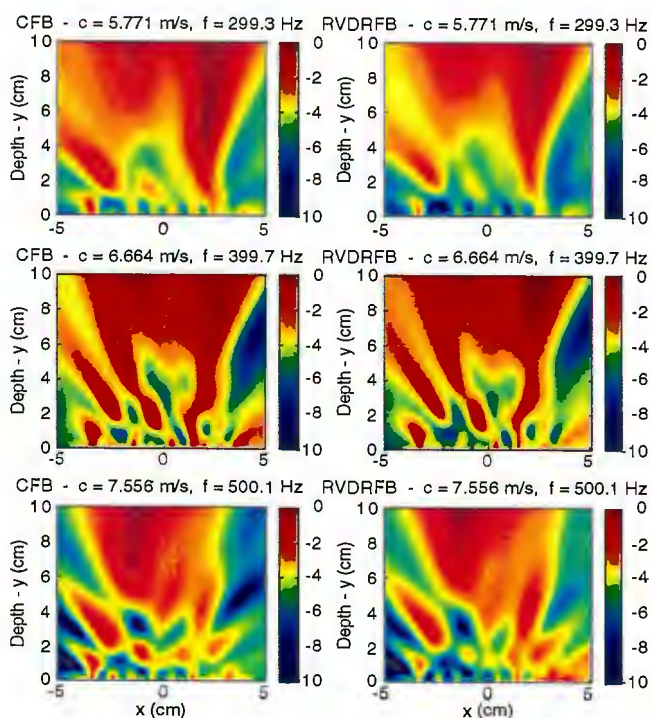


Figure A-140. Image of Data Set 924: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 924_32_512.csd
 Runname: 924_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.546
 CFB Surface Maximum Location
 X (cm): 3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 3.591
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.386
 CFB Surface Maximum Location
 X (cm): 2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.125
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.961
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.062
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

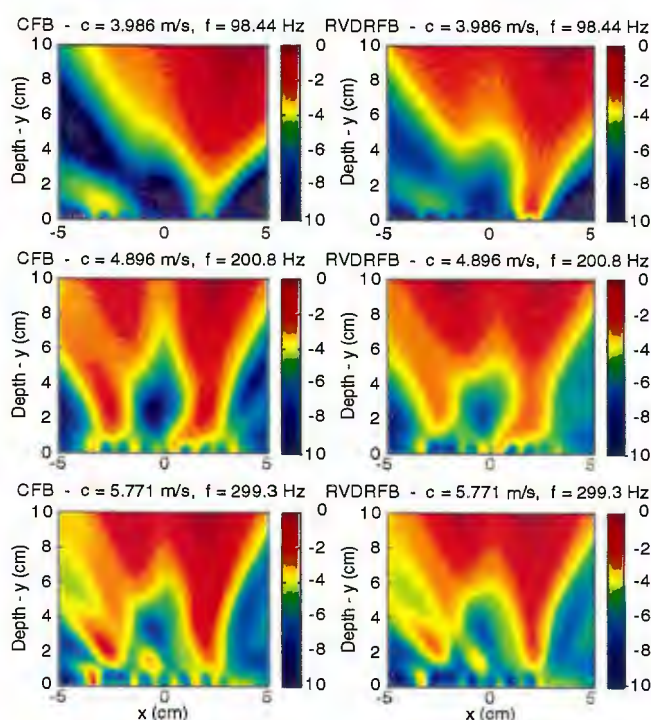


Figure A-141. Image of Data Set 924: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 924_32_512.csd
 Runname: 924_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.961
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.062
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.653
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 5.555
 RVDR Surface Normalization (dB): 1.113
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.762
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.909
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

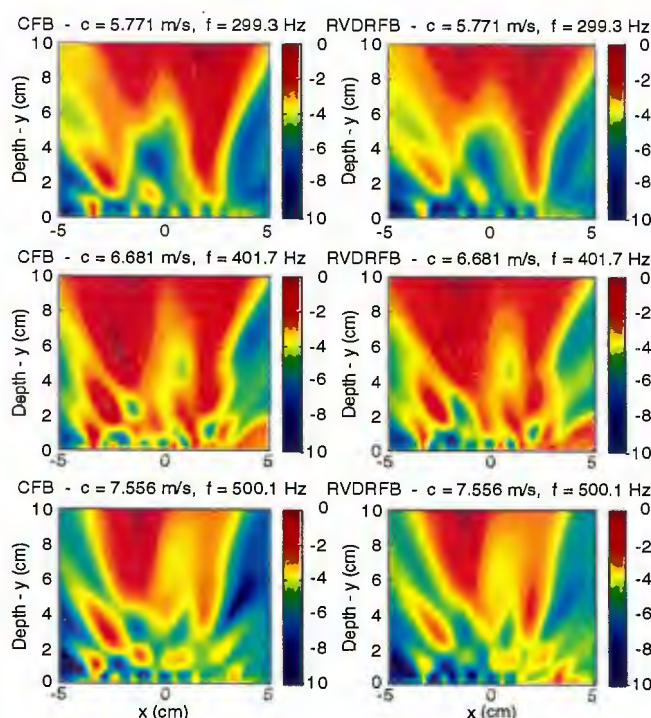


Figure A-142. Image of Data Set 924: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 924_64_256.csd
 Runname: 924_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.551
 CFB Surface Maximum Location
 X (cm): 3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 3.885
 RVDR Surface Maximum Location
 X (cm): 3.98 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.844
 CFB Surface Maximum Location
 X (cm): 2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.833
 RVDR Surface Maximum Location
 X (cm): 2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.228
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.788
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

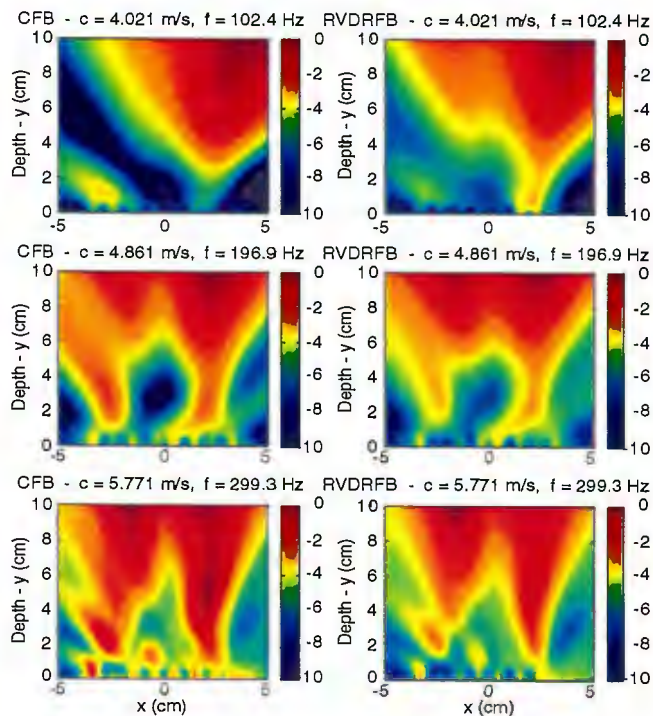


Figure A-143. Image of Data Set 924: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 924_64_256.csd
 Runname: 924_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.228
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.788
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.54
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.129
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.817
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 0.8783
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

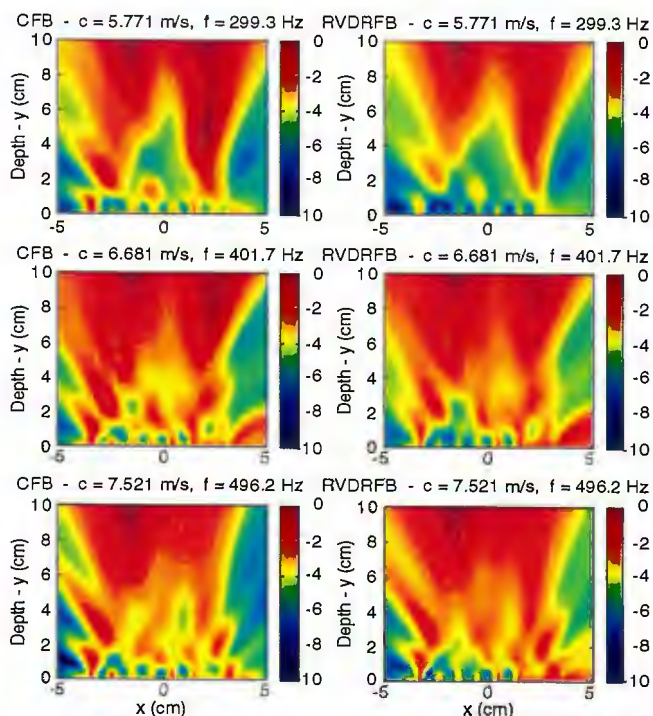


Figure A-144. Image of Data Set 924: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Bottom), and 500 Hz (Bottom)

Filename: 925_16_1024.csd
 Runname: 925_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.785
 CFB Surface Maximum Location
 X (cm): 4.796 Y (cm): 10
 RVDR Surface Normalization (dB): 3.689
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.605
 CFB Surface Maximum Location
 X (cm): 2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 1.091
 RVDR Surface Maximum Location
 X (cm): 2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.461
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6012
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

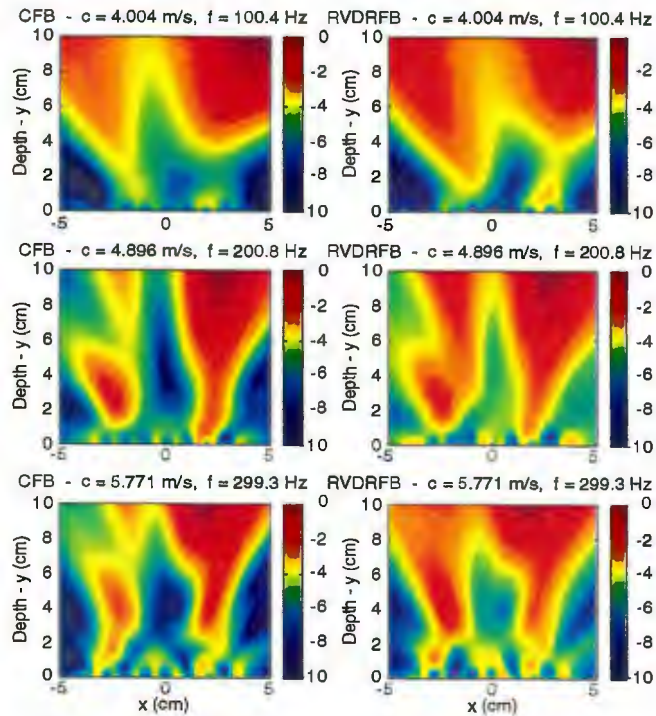


Figure A-145. Image of Data Set 925: 16 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 925_16_1024.csd
 Runname: 925_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.461
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6012
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.785
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): -0.3427
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.829
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.724
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

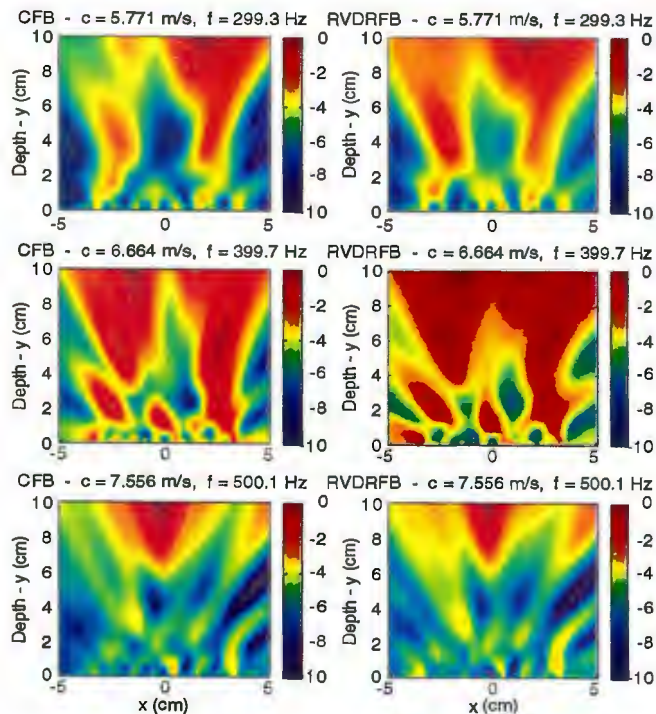


Figure A-146. Image of Data Set 925: 16 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 925_32_512.csd
 Runname: 925_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.3
 CFB Surface Maximum Location
 X (cm): 4.796 Y (cm): 10
 RVDR Surface Normalization (dB): 3.474
 RVDR Surface Maximum Location
 X (cm): 4.592 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.656
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9008
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.005
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9977
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

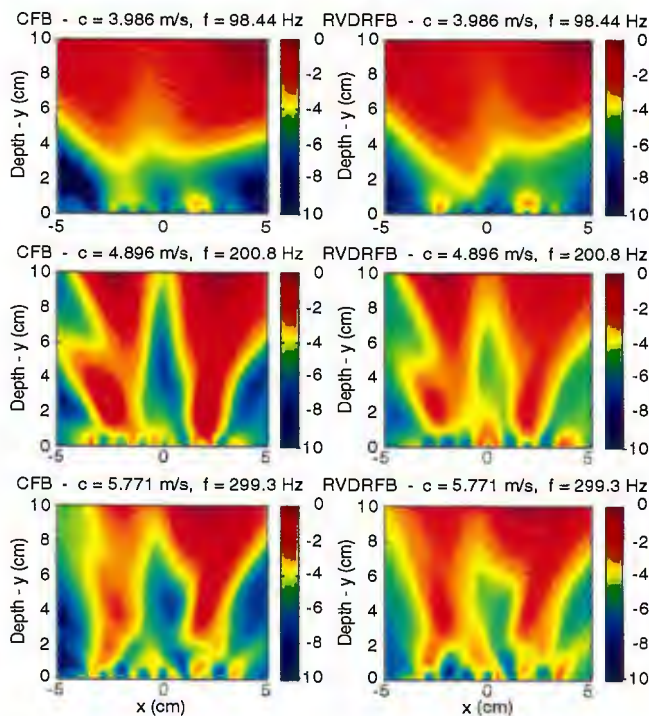


Figure A-147. Image of Data Set 925: 32 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 925_32_512.csd
 Runname: 925_32_512
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.005
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9977
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.556
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.091
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.607
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 1.572
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

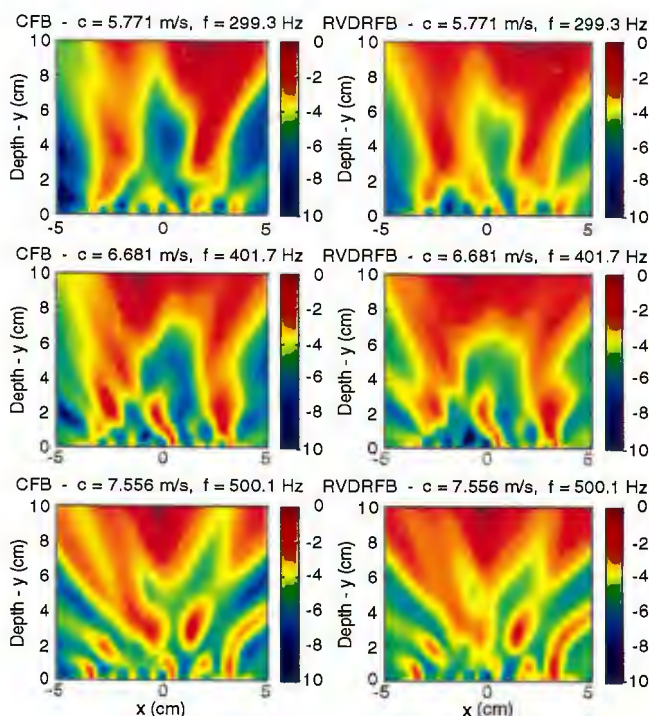


Figure A-148. Image of Data Set 925: 32 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 925_64_256.csd
 Runname: 925_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.359
 CFB Surface Maximum Location
 X (cm): 4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 3.479
 RVDR Surface Maximum Location
 X (cm): 4.592 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.063
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.173
 RVDR Surface Maximum Location
 X (cm): 2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.25
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.541
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

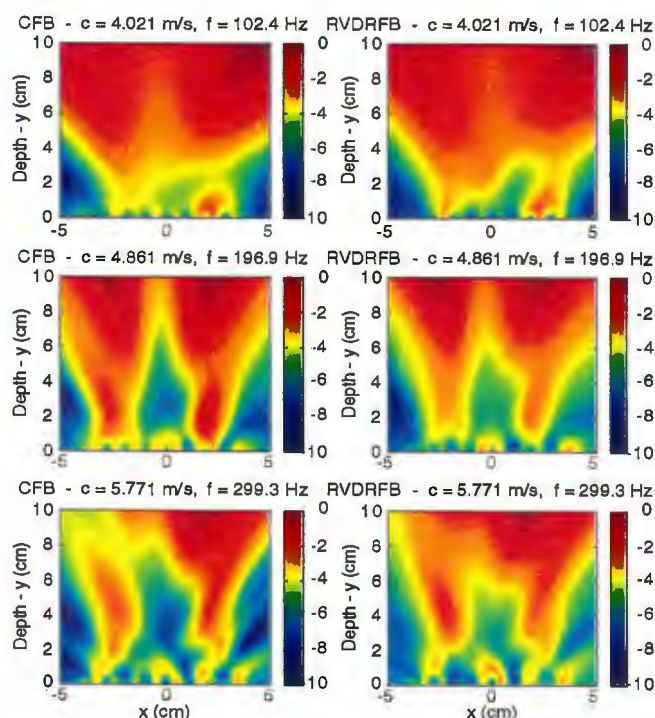


Figure A-149. Image of Data Set 925: 64 FFTs, 15 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 925_64_256.csd
 Runname: 925_64_256
 Diastolic Phase
 Spreading Parameter = 1
 15 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.25
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.541
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.334
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9499
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.489
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.195
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

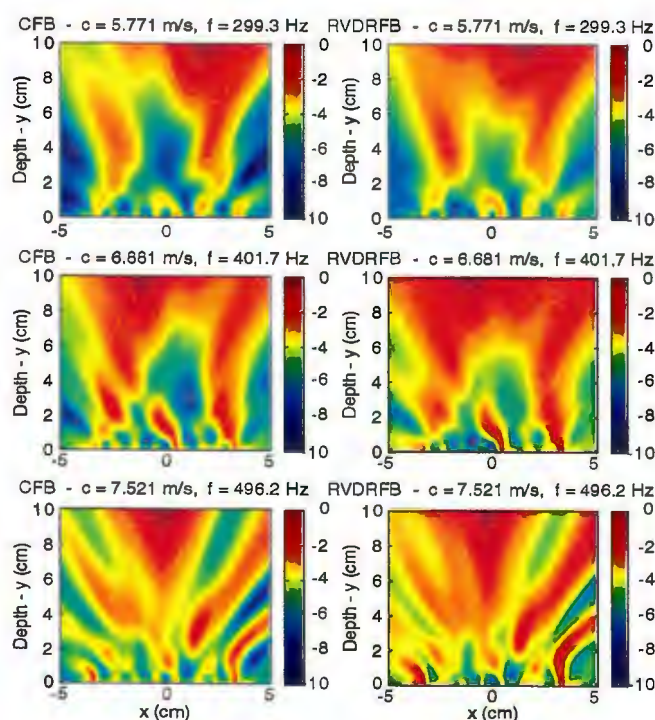


Figure A-150. Image of Data Set 925: 64 FFTs, 15 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

APPENDIX B

IMAGES FOR IMAGE SET 2

The image set in this appendix comprises images from 25 data sets. Each data set consists of approximately 16,000 data points, selected from a 60-second sample. The points were taken exclusively from the diastolic phase of the heartbeat. An EKG was used to definitively identify the S1 heart sound. From that, the S2 heart sound was located and data points were taken from the interval between the S2 sound and the following S1 sound.

Each of the 25 data sets was processed using three different combinations of FFT length and number of FFTs performed: 16 FFTs with length of 1024 points, 32 FFTs with length of 512 points, and 64 FFTs with length of 256 points, creating a total of 75 processed data sets.

For image set 2, the following input values were used in creating the beamformed images. The wave speed through tissue at 100 Hz was set at 4 m/s. The wave speed at 1000 Hz was set at 12 m/s. These values were selected based on given wave speed values of 3.75 m/s and 13 m/s, respectively, and should be experimented with in future image sets. The RVDR enhancement value was 6.0. This value was chosen while experimenting with one of the above data sets. Nine of the 15 channels were processed. Processing 9 channels allows a comparison of the linear array and the volumetric array. This comparison will provide insight into the effect of the array's "wings" on the final image.

Filename: 901_16_1024.csd
 Runname: 901_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.702
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 4.712
 RVDR Surface Maximum Location
 X (cm): -3.96 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.859
 CFB Surface Maximum Location
 X (cm): 2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 2.47
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.39
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 3.248
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

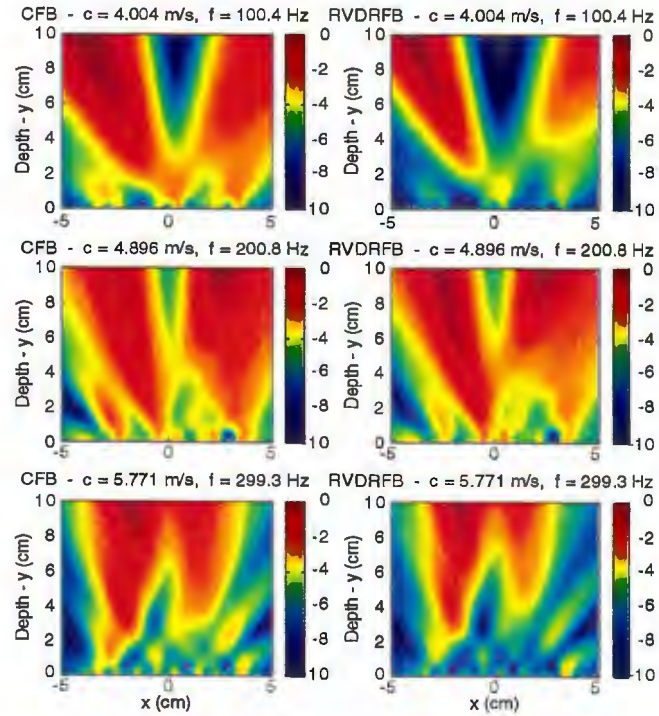


Figure B-1. Image of Data Set 901: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 901_16_1024.csd
 Runname: 901_16_1024
 DAWG Data
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.39
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 3.248
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.683
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.312
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.285
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.23
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

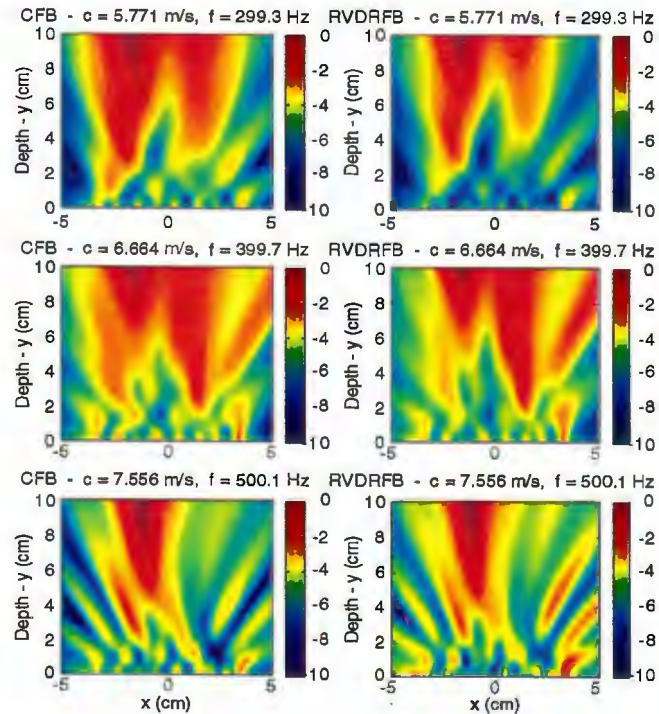


Figure B-2. Image of Data Set 901: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 901_32_512.csd
 Runname: 901_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.898
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 3.952
 RVDR Surface Maximum Location
 X (cm): -4.184 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.66
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.079
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.767
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.717
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

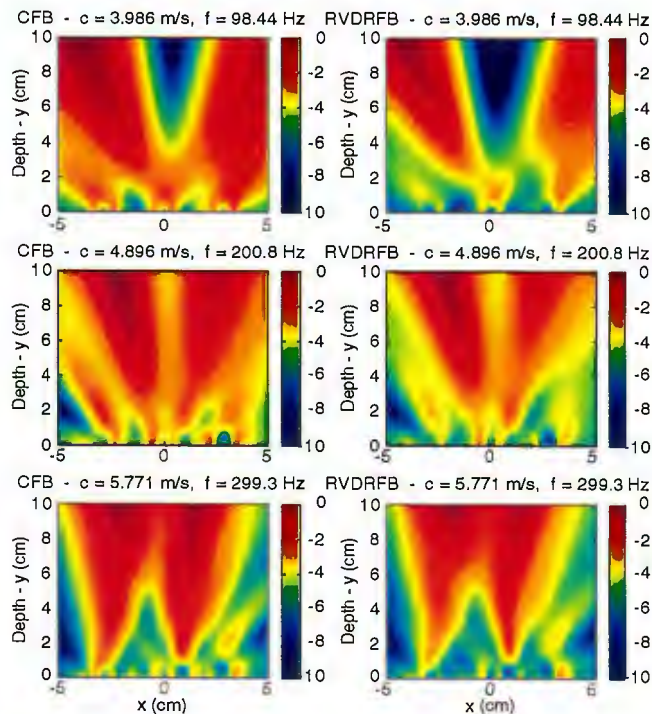


Figure B-3. Image of Data Set 901: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 901_32_512.csd
 Runname: 901_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.767
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.717
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.869
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.941
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.061
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.32
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

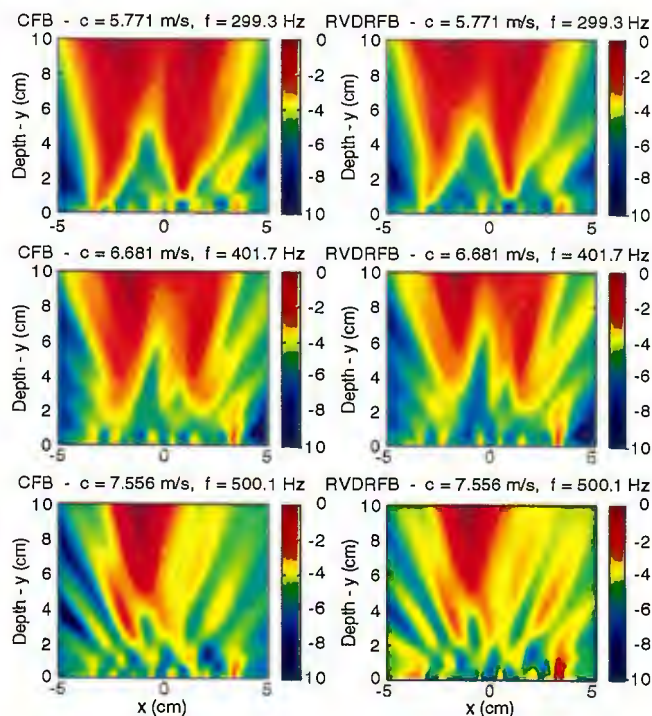


Figure B-4. Image of Data Set 901: 32 FFTs, 9 Channels Used at 300 Hz (Top) 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 901_64_256.csd
 Runname: 901_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.092
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 3.942
 RVDR Surface Maximum Location
 X (cm): -3.98 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.42
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.769
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.895
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.767
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

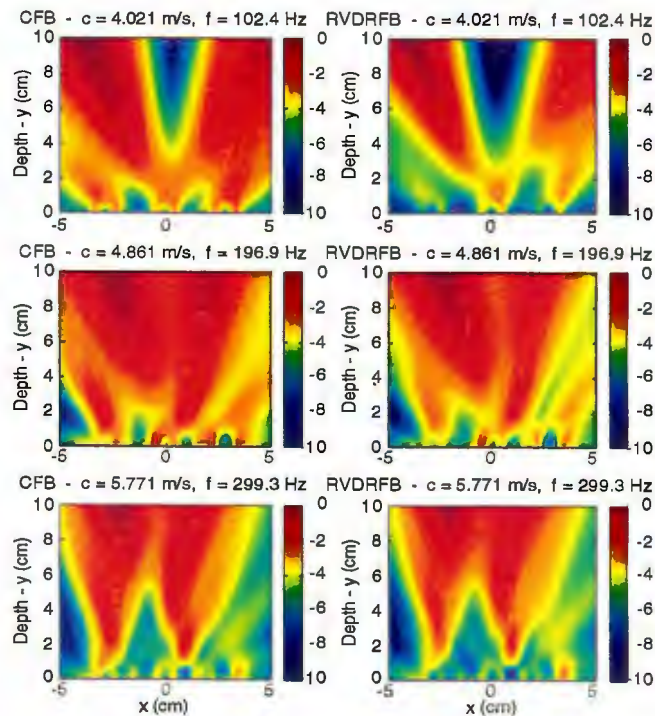


Figure B-5. Image of Data Set 901: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 901_64_256.csd
 Runname: 901_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.895
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.767
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.657
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.696
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.929
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 2.322
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

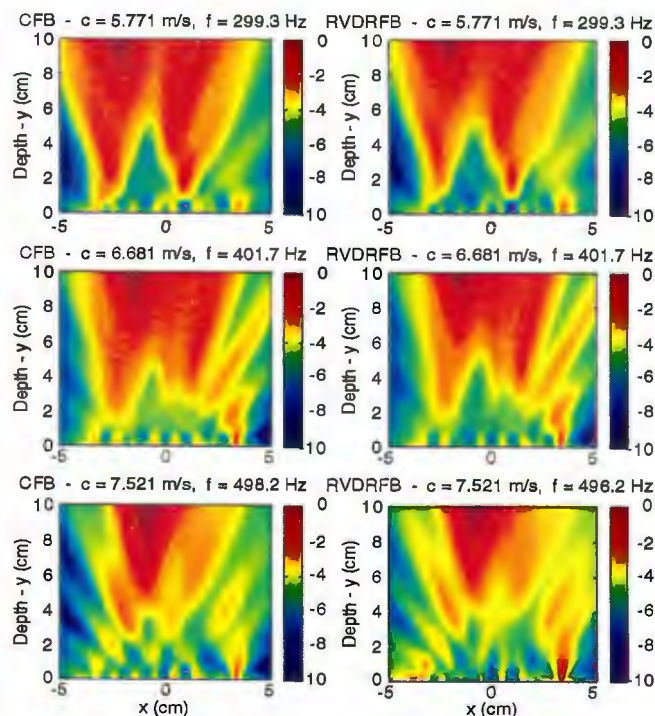


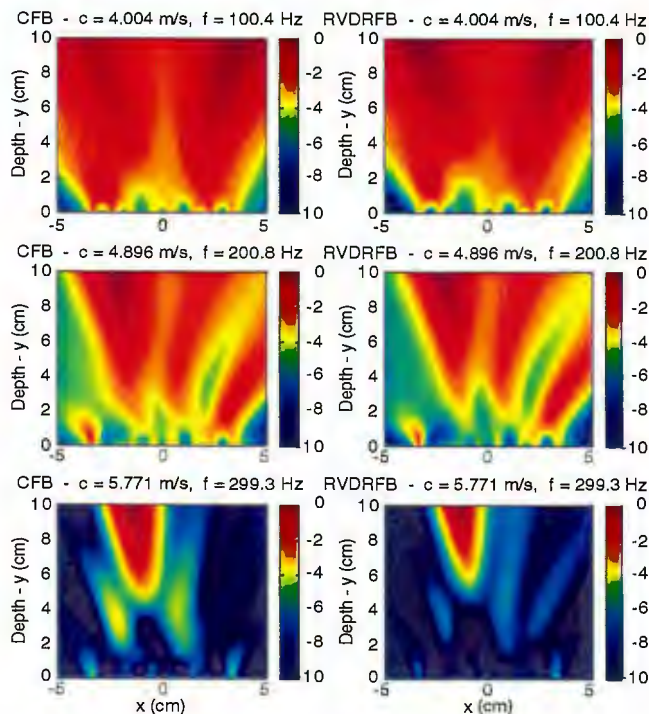
Figure B-6. Image of Data Set 901: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 902_16_1024.csd
 Runname: 902_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.809
 CFB Surface Maximum Location
 X (cm): 3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 3.68
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.207
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.756
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 7.178
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 5.288
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10



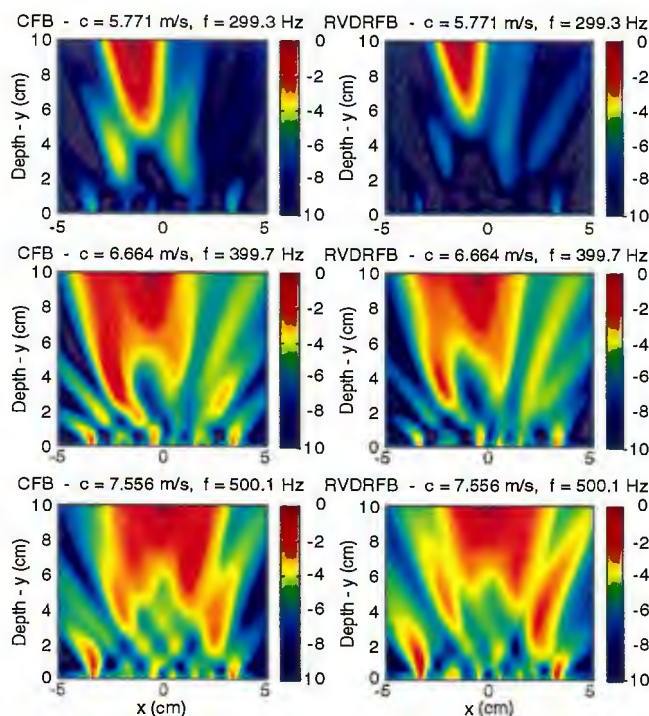
**Figure B-7. Image of Data Set 902: 16 FFTs, 9 Channels Used at 100 Hz (Top)
 200 Hz (Middle), and 300 Hz (Bottom)**

Filename: 902_16_1024.csd
 Runname: 902_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 7.178
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 5.288
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.596
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.874
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.223
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.92
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10



**Figure B-8. Image of Data Set 902: 16 FFTs, 9 Channels Used at 300 Hz (Top),
 400 Hz (Middle), and 500 Hz (Bottom)**

Filename: 902_32_512.csd
 Runname: 902_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.086
 CFB Surface Maximum Location
 X (cm): -3.571 Y (cm): 10
 RVDR Surface Normalization (dB): 4.34
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.235
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 3.581
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 6.485
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 4.843
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

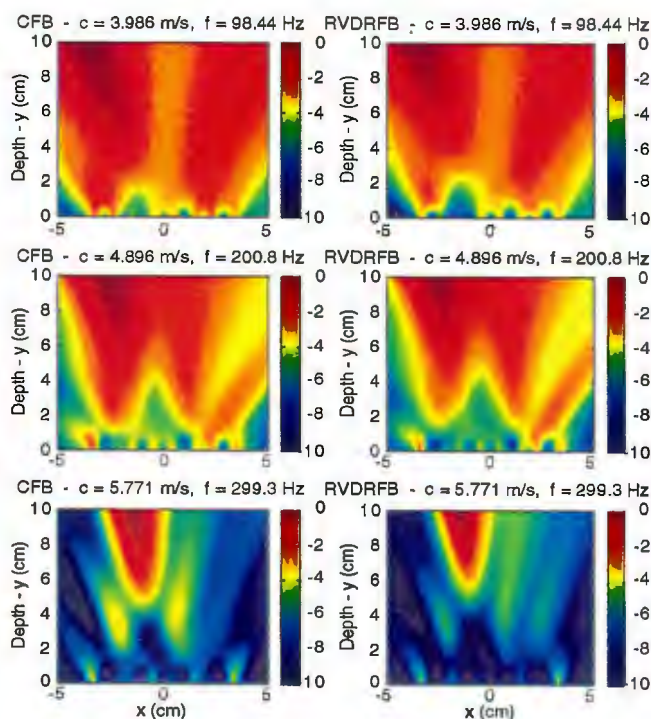


Figure B-9. Image of Data Set 902: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 902_32_512.csd
 Runname: 902_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 6.485
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 4.843
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.827
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 1.803
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.927
 CFB Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 1.692
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.9082

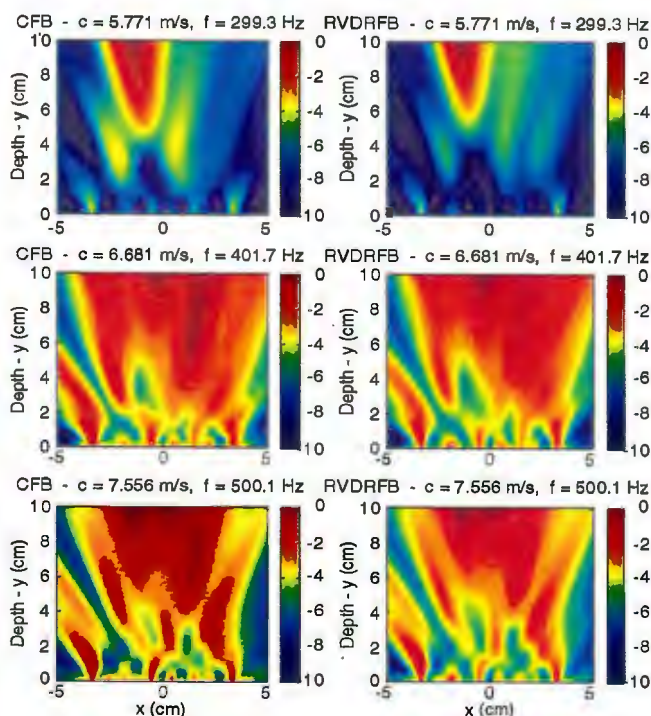


Figure B-10. Image of Data Set 902: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 902_64_256.csd
 Runname: 902_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.798
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 10
 RVDR Surface Normalization (dB): 4.045
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.549
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 3.791
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 5.873
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 4.49
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

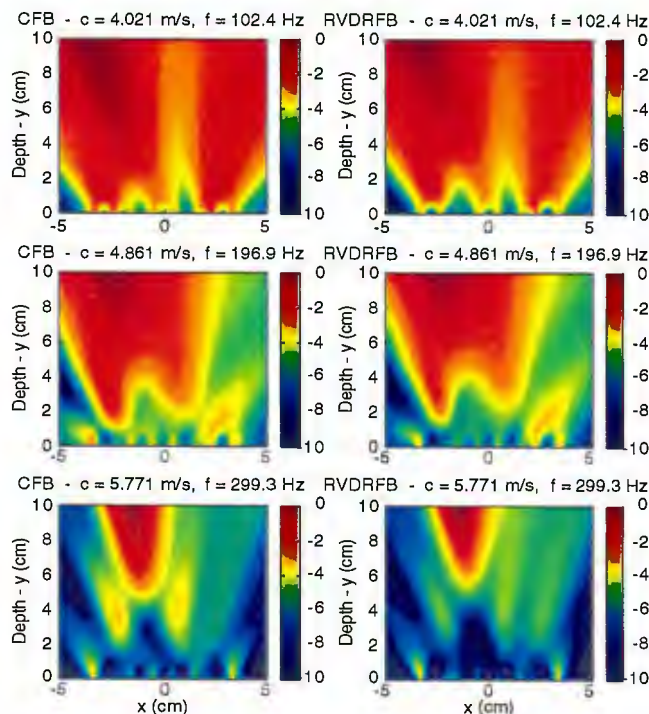


Figure B-11. Image of Data Set 902: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 902_64_256.csd
 Runname: 902_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 5.873
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 4.49
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.651
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 0.1
 RVDR Surface Normalization (dB): 1.67
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.089
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 1.653
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

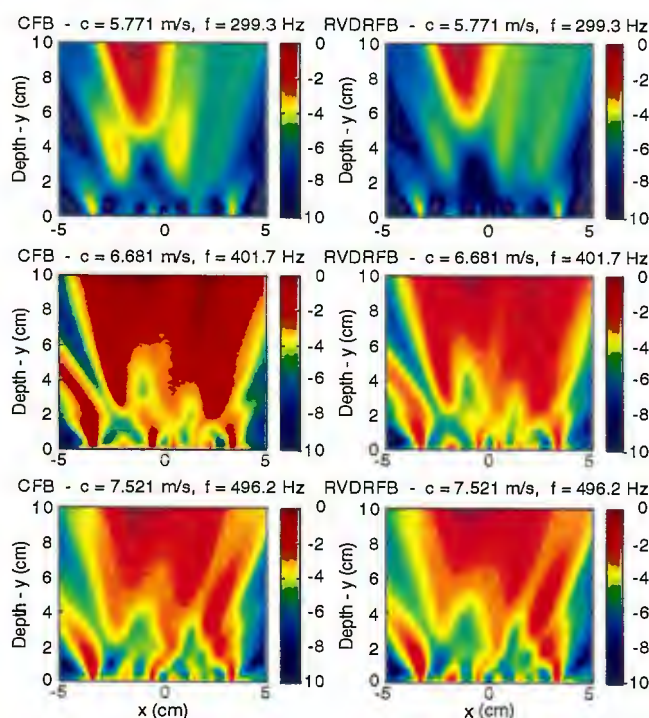


Figure B-12. Image of Data Set 902: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 903_16_1204.csd
 Runname: 903_16_1204
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.461
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 9.596
 RVDR Surface Normalization (dB): 6.004
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.087
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 3.936
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.762
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 3.158
 RVDR Surface Maximum Location
 X (cm): 2.347 Y (cm): 10

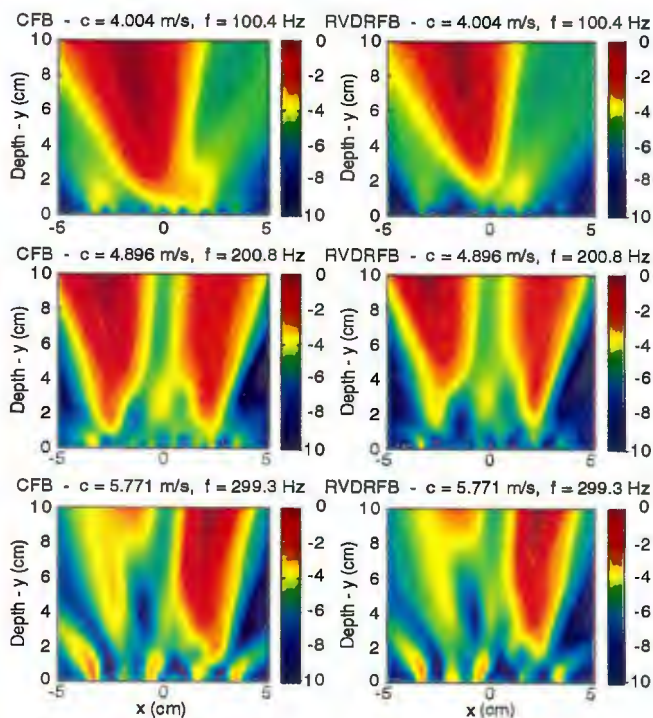


Figure B-13. Image of Data Set 903: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 903_16_1204.csd
 Runname: 903_16_1204
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.762
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 3.158
 RVDR Surface Maximum Location
 X (cm): 2.347 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.351
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.271
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.76
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.058
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

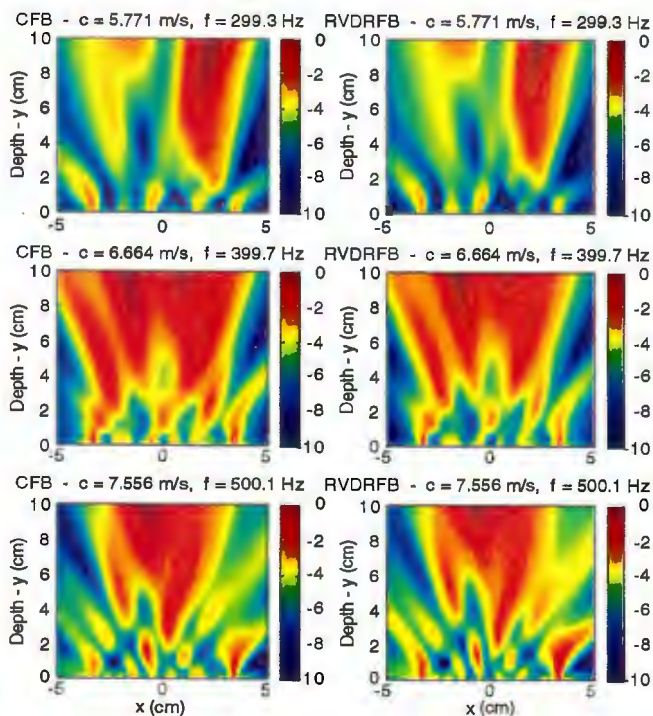


Figure B-14. Image of Data Set 903: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 903_32_512.csd
 Runname: 903_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.814
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 9.798
 RVDR Surface Normalization (dB): 5.331
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.688
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 3.848
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.264
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.862
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

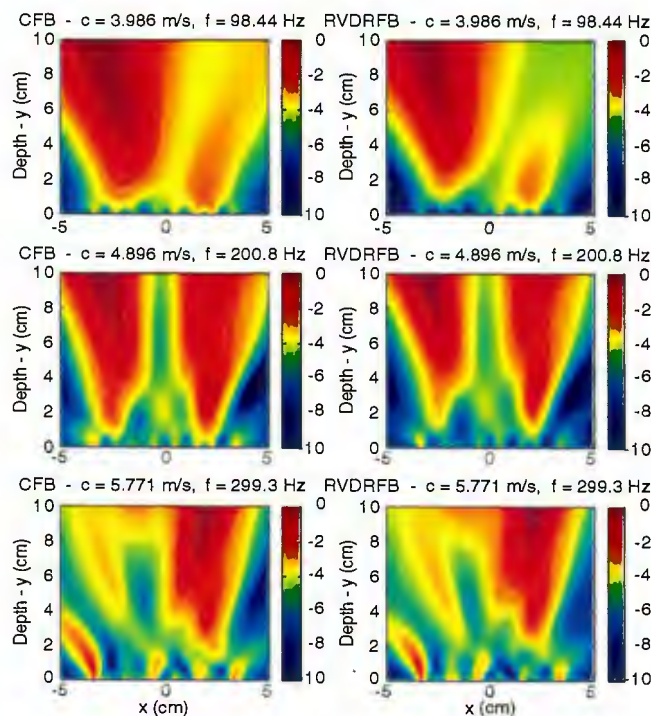


Figure B-15. Image of Data Set 903: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 903_32_512.csd
 Runname: 903_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.264
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.862
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.433
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.446
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.35
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.053
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

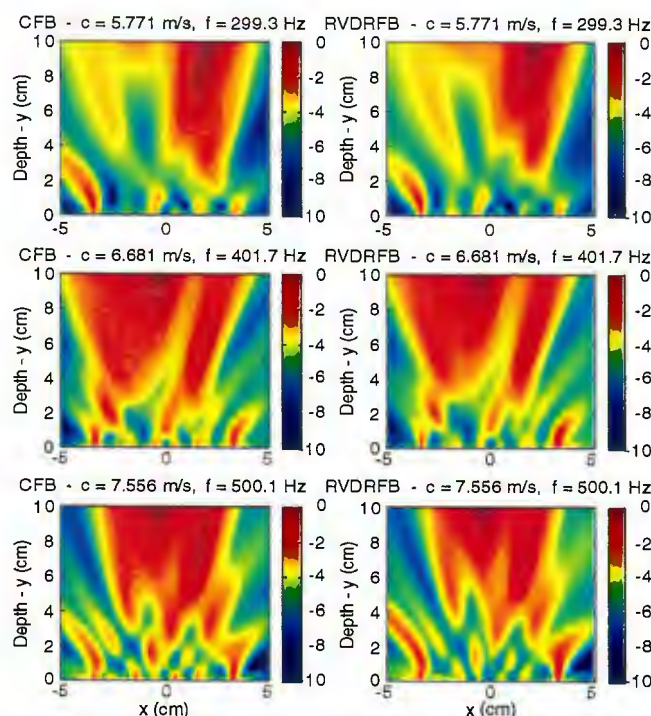


Figure B-16. Image of Data Set 903: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 903_64_256.csd
 Runname: 903_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.294
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 4.924
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.323
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 3.746
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.592
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.703
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

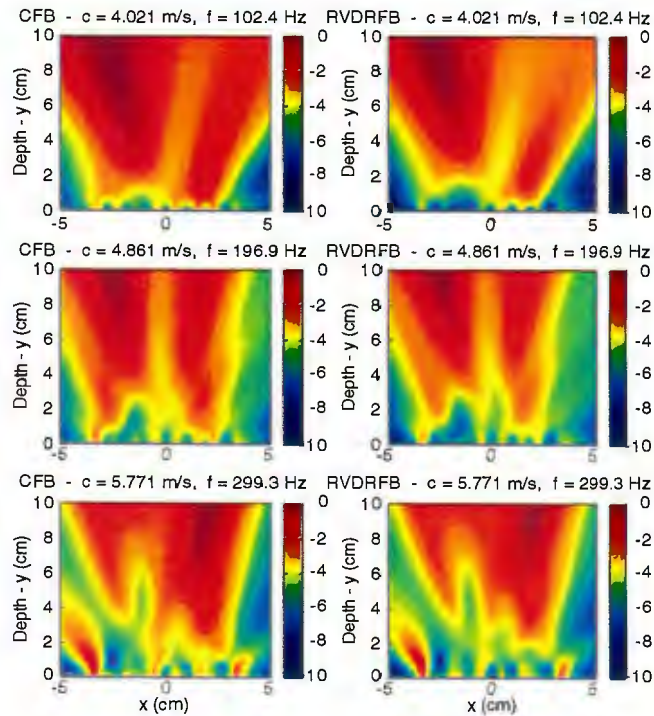


Figure B-17. Image of Data Set 903: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 903_64_256.csd
 Runname: 903_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.592
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.703
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.831
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 6.161
 RVDR Surface Normalization (dB): 1.918
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.396
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.566
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

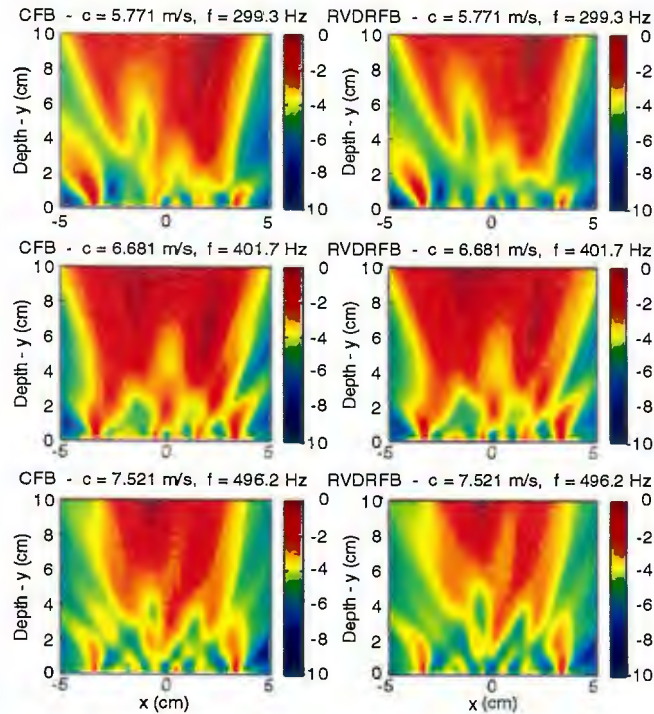


Figure B-18. Image of Data Set 903: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 904_16_1024.csd
 Runname: 904_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.096
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 5.352
 RVDR Surface Maximum Location
 X (cm): -3.98 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.75
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 3.706
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.221
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.018
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

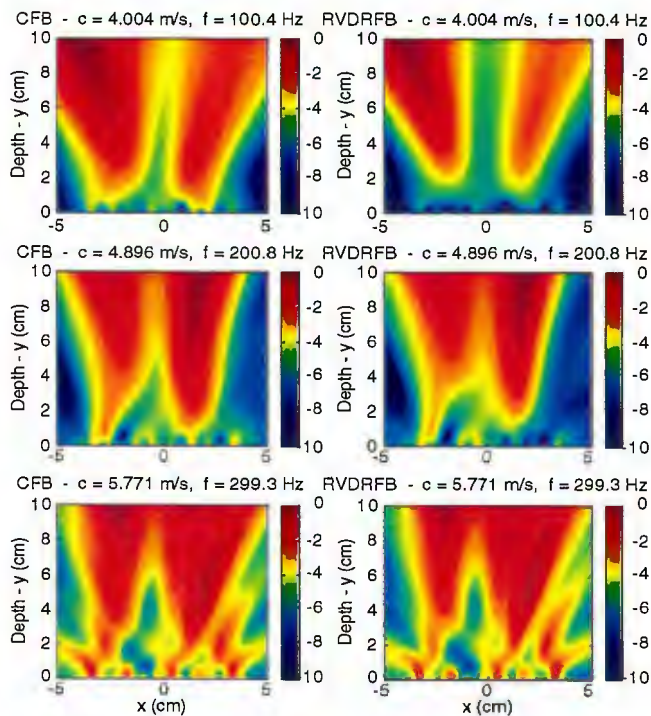


Figure B-19. Image of Data Set 904: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 904_16_1024.csd
 Runname: 904_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.221
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.018
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.935
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.548
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.812
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.962
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

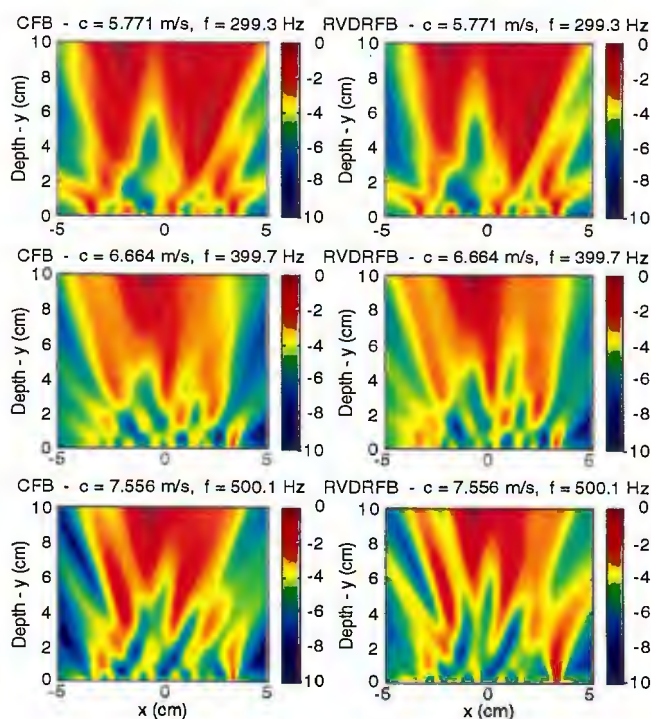


Figure B-20. Image of Data Set 904: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 904_32_512.csd
 Runname: 904_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.523
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 4.737
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.005
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 3.217
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.78
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 4.343
 RVDR Surface Normalization (dB): 1.831
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 4.343

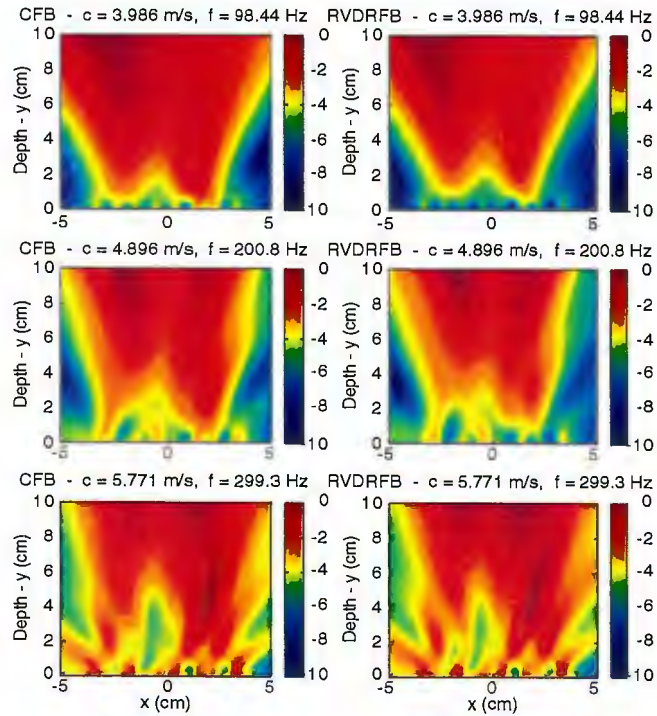


Figure B-21. Image of Data Set 904: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 904_32_512.csd
 Runname: 904_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.78
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 4.343
 RVDR Surface Normalization (dB): 1.831
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 4.343

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.978
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 2.575
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.623
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.937
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

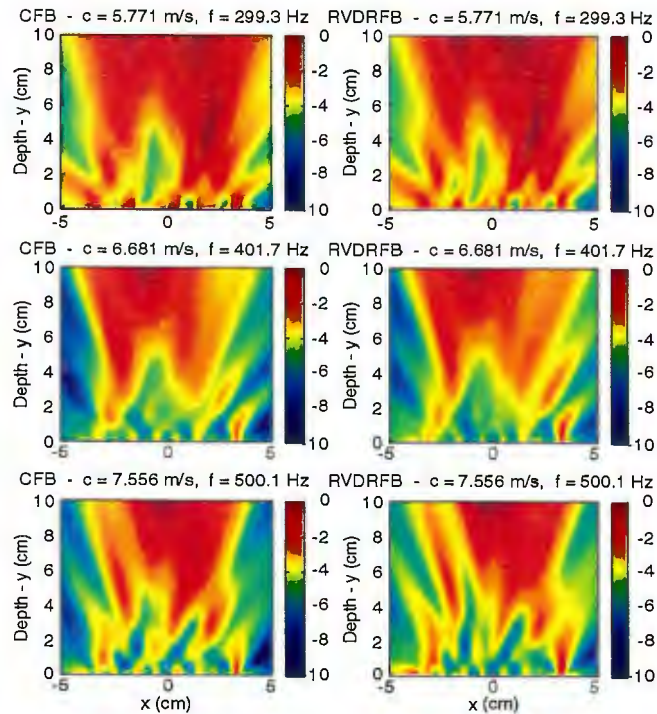


Figure B-22. Image of Data Set 904: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 904_64_256.csd
 Runname: 904_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.008
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 8.182
 RVDR Surface Normalization (dB): 4.23
 RVDR Surface Maximum Location
 X (cm): -3.571 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.678
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 6.969
 RVDR Surface Normalization (dB): 3.24
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.258
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 4.343
 RVDR Surface Normalization (dB): 2.347
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 4.747

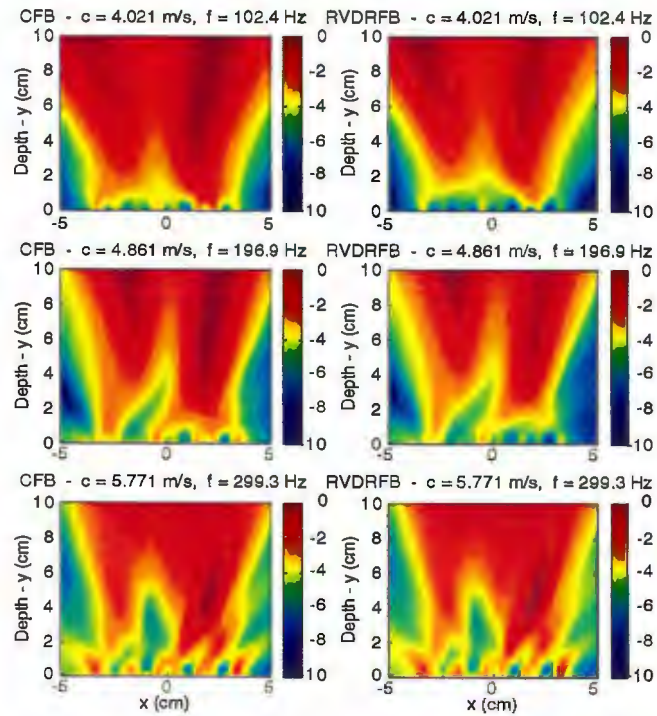


Figure B-23. Image of Data Set 904: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 904_64_256.csd
 Runname: 904_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.258
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 4.343
 RVDR Surface Normalization (dB): 2.347
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 4.747

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.752
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 2.762
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.142
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.179
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

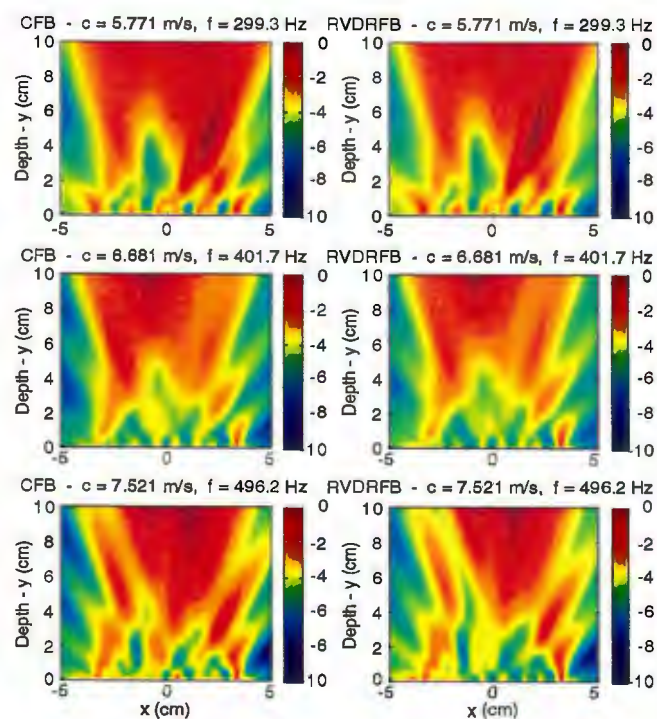


Figure B-24. Image of Data Set 904: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 905_16_1024.csd
 Runname: 905_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.607
 CFB Surface Maximum Location
 X (cm): -4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 4.57
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 9.798

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.335
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 4.747
 RVDR Surface Normalization (dB): 4.408
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 4.949

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.496
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.453
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

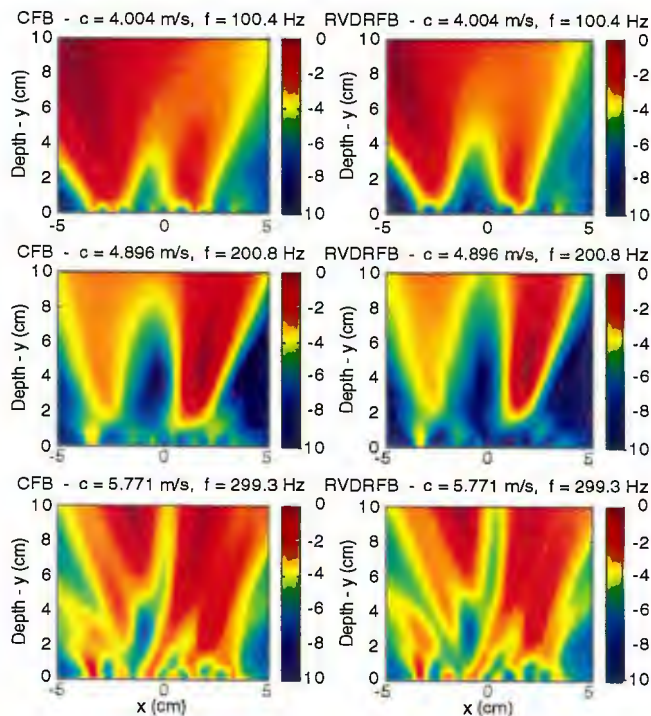


Figure B-25. Image of Data Set 905: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 905_16_1024.csd
 Runname: 905_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.496
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.453
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.276
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.242
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.199
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 6.363
 RVDR Surface Normalization (dB): 1.467
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 4.949

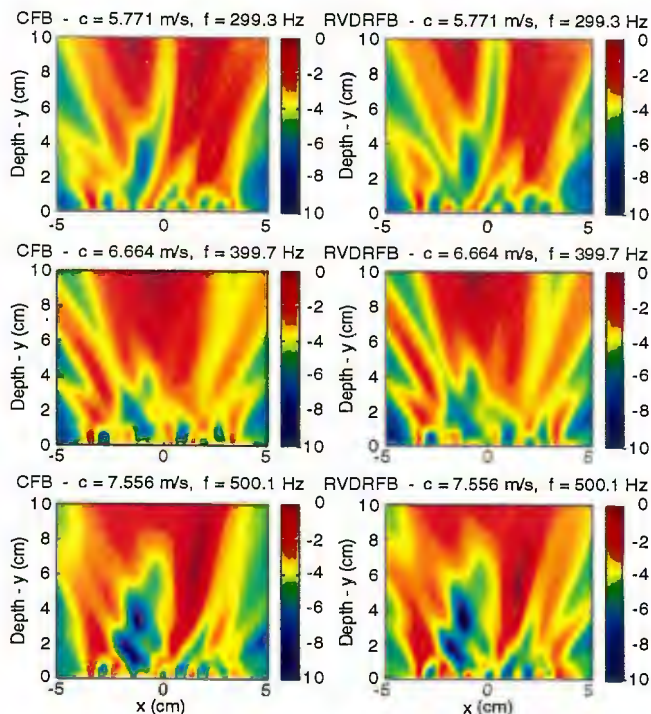


Figure B-26. Image of Data Set 905: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 905_32_512.csd
Runname: 905_32_512

Diastolic Phase
Spreading Parameter = 1
9 Channels Processed
Z Value of Cut (cm): 0
Wave Speed Interpolation
4 m/s at 100 Hz
12 m/s at 1000 Hz
Number of Temporal FFTs: 32
Number of Points per FFT: 512
Frequency Bin Resolution (Hz): 3.938
RVDR Enhancement (linear): 6

Frequency 100 Hz
CFB Surface Normalization (dB): 6.482
CFB Surface Maximum Location
X (cm): -3.776 Y (cm): 10
RVDR Surface Normalization (dB): 5.402
RVDR Surface Maximum Location
X (cm): -3.98 Y (cm): 10

Frequency 200 Hz
CFB Surface Normalization (dB): 4.691
CFB Surface Maximum Location
X (cm): 1.735 Y (cm): 4.141
RVDR Surface Normalization (dB): 3.8
RVDR Surface Maximum Location
X (cm): 1.735 Y (cm): 4.343

Frequency 300 Hz
CFB Surface Normalization (dB): 3.354
CFB Surface Maximum Location
X (cm): 2.143 Y (cm): 10
RVDR Surface Normalization (dB): 2.252
RVDR Surface Maximum Location
X (cm): 2.143 Y (cm): 9.798

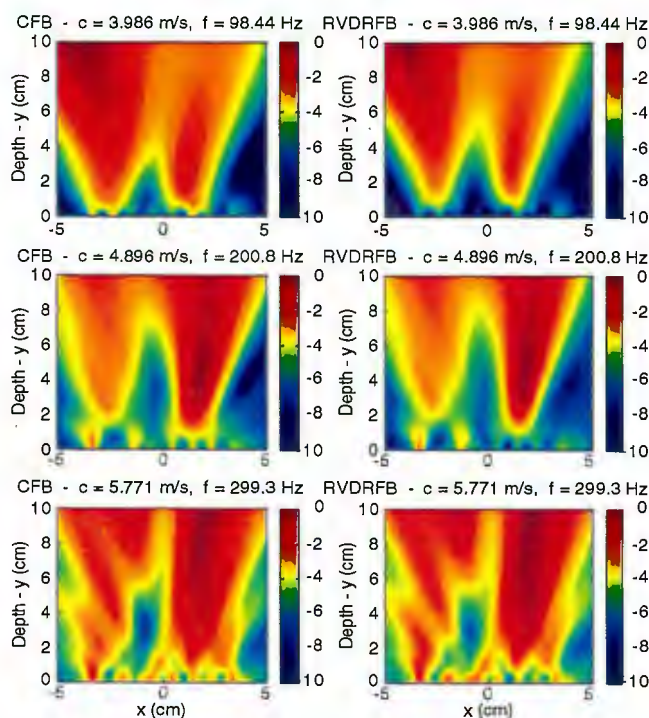


Figure B-27. Image of Data Set 905: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 905_32_512.csd
Runname: 905_32_512

Diastolic Phase
Spreading Parameter = 1
9 Channels Processed
Z Value of Cut (cm): 0
Wave Speed Interpolation
4 m/s at 100 Hz
12 m/s at 1000 Hz
Number of Temporal FFTs: 32
Number of Points per FFT: 512
Frequency Bin Resolution (Hz): 3.938
RVDR Enhancement (linear): 6

Frequency 300 Hz
CFB Surface Normalization (dB): 3.354
CFB Surface Maximum Location
X (cm): 2.143 Y (cm): 10
RVDR Surface Normalization (dB): 2.252
RVDR Surface Maximum Location
X (cm): 2.143 Y (cm): 9.798

Frequency 400 Hz
CFB Surface Normalization (dB): 3.681
CFB Surface Maximum Location
X (cm): -0.5102 Y (cm): 10
RVDR Surface Normalization (dB): 2.987
RVDR Surface Maximum Location
X (cm): -0.7143 Y (cm): 10

Frequency 500 Hz
CFB Surface Normalization (dB): 2.478
CFB Surface Maximum Location
X (cm): 1.531 Y (cm): 5.151
RVDR Surface Normalization (dB): 1.218
RVDR Surface Maximum Location
X (cm): 1.531 Y (cm): 4.949

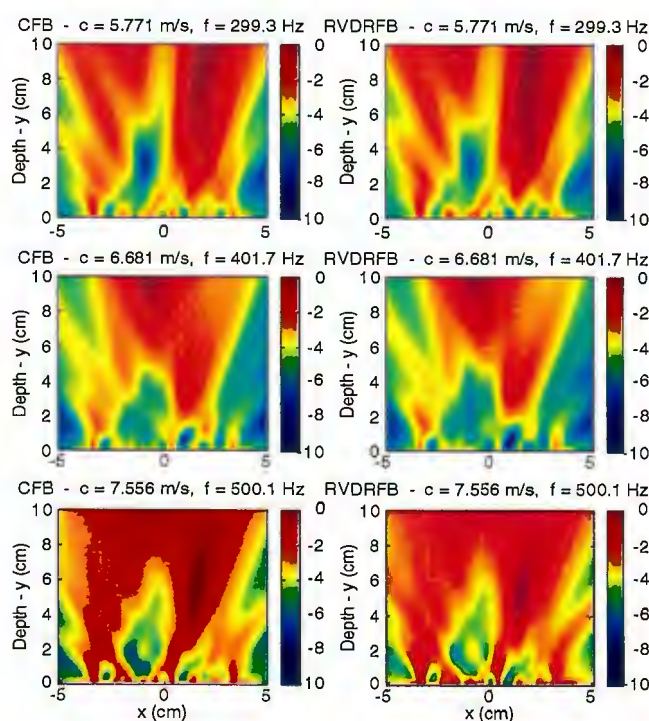


Figure B-28. Image of Data Set 905: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 905_64_256.csd
 Runname: 905_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.126
 CFB Surface Maximum Location
 X (cm): -4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 5.143
 RVDR Surface Maximum Location
 X (cm): -4.592 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.269
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 4.343
 RVDR Surface Normalization (dB): 3.068
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 4.343

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.623
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.541
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

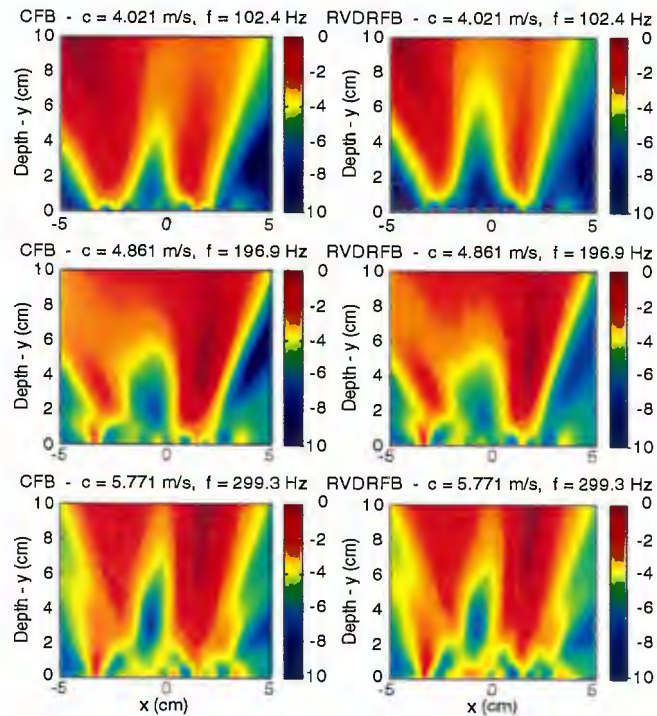


Figure B-29. Image of Data Set 905: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 905_64_256.csd
 Runname: 905_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.623
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.541
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.111
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.579
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.514
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 6.969
 RVDR Surface Normalization (dB): 1.409
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

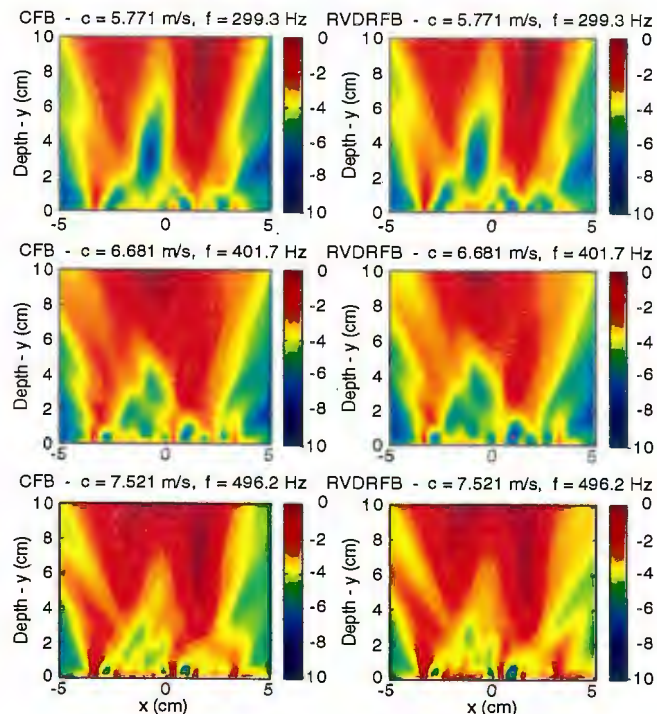


Figure B-30. Image of Data Set 905: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 906_16_1024.csd
 Runname: 906_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.259
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 5.758
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.899
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 3.336
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.846
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 9.596
 RVDR Surface Normalization (dB): 2.318
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

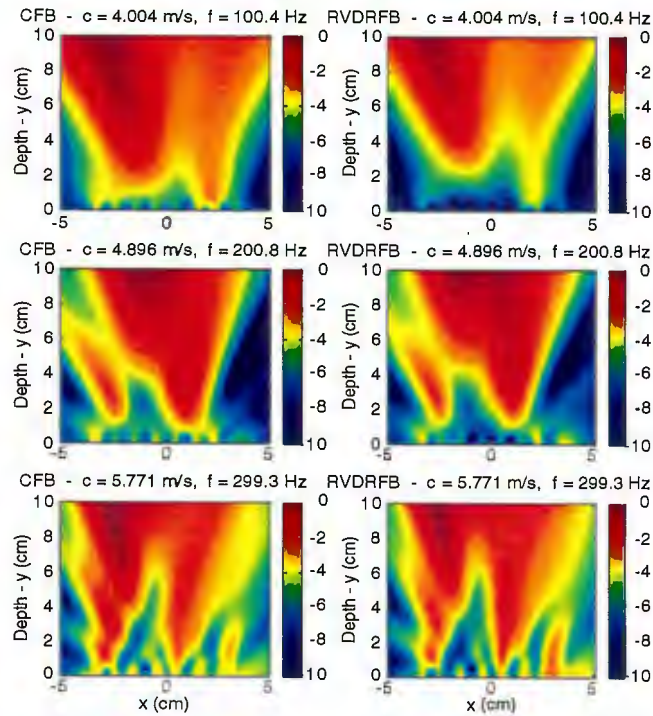


Figure B-31. Image of Data Set 906: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 906_16_1024.csd
 Runname: 906_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.846
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 9.596
 RVDR Surface Normalization (dB): 2.318
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.377
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.6
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.192
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.247
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

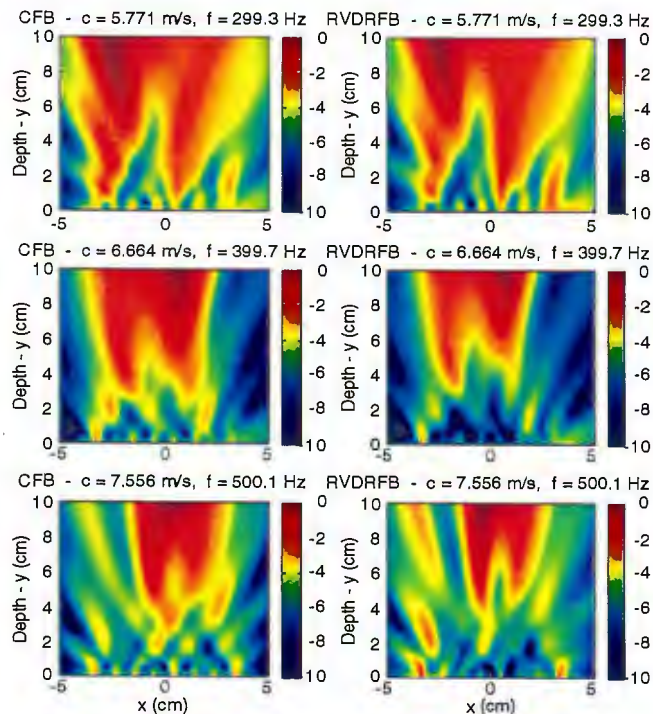


Figure B-32. Image of Data Set 906: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 906_32_512.csd
 Runname: 906_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.848
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 5.282
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.795
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.992
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.369
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.291
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

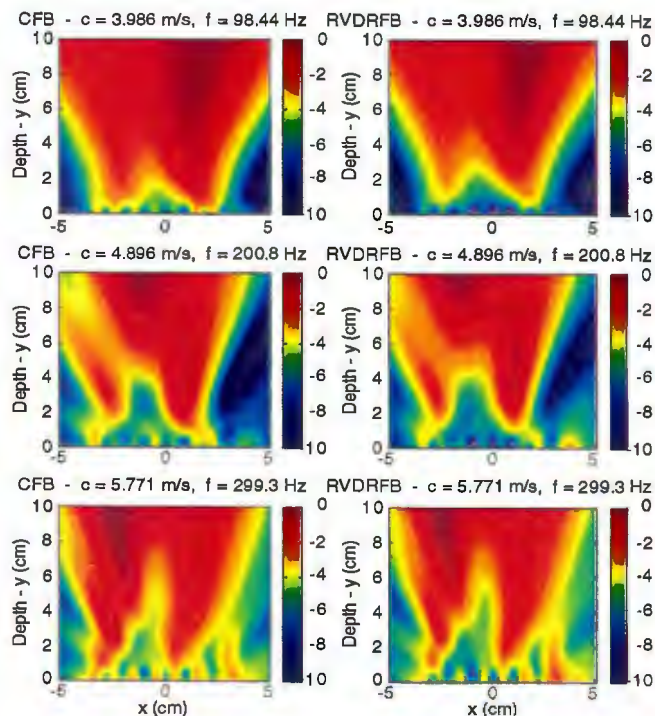


Figure B-33. Image of Data Set 906: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 906_32_512.csd
 Runname: 906_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.369
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.291
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.934
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 3.102
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.345
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.204
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

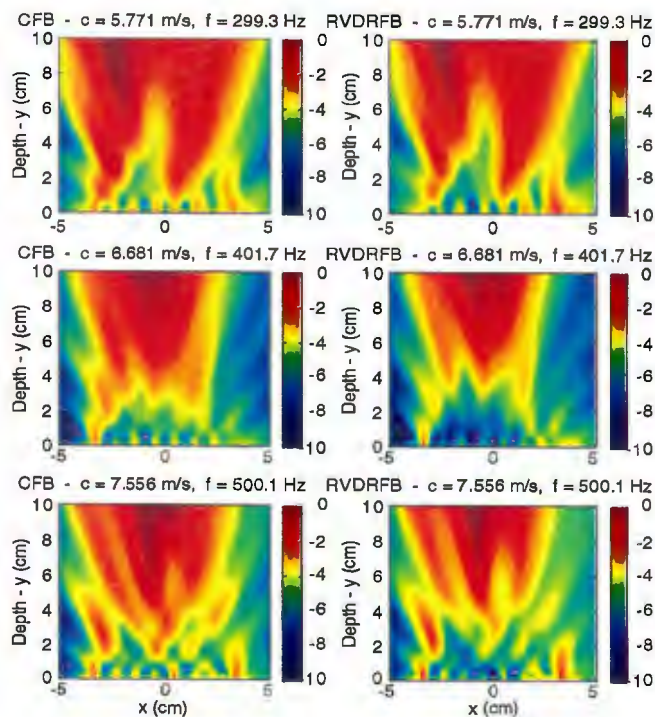


Figure B-34. Image of Data Set 906: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 906_64_256.csd
 Runname: 906_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.354
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 4.731
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.194
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 3.485
 RVDR Surface Maximum Location
 X (cm): 0.102 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.436
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.711
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

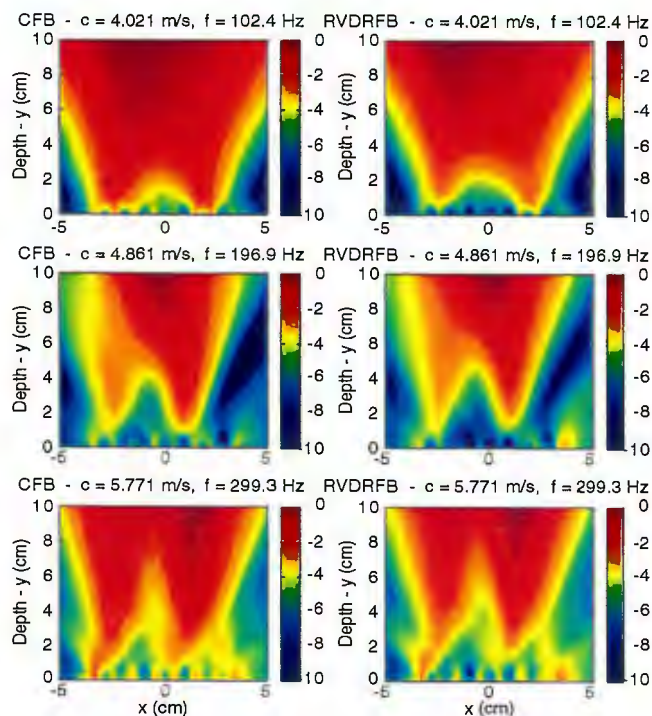


Figure B-35. Image of Data Set 906: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 906_64_256.csd
 Runname: 906_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.436
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.711
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.612
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.914
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.716
 CFB Surface Maximum Location
 X (cm): 0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.204
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

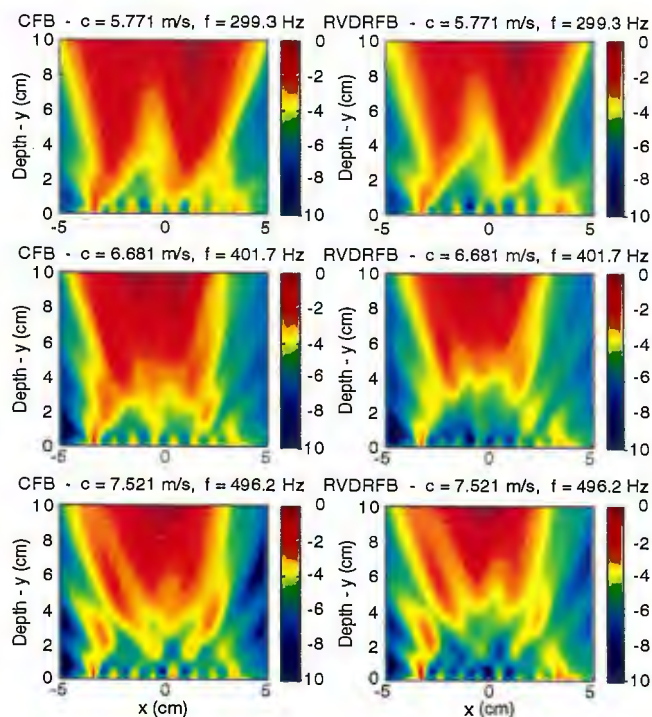


Figure B-36. Image of Data Set 906: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 907_16_1024.csd
 Runname: 907_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.893
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 6.247
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.833
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 3.651
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.203
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.516
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

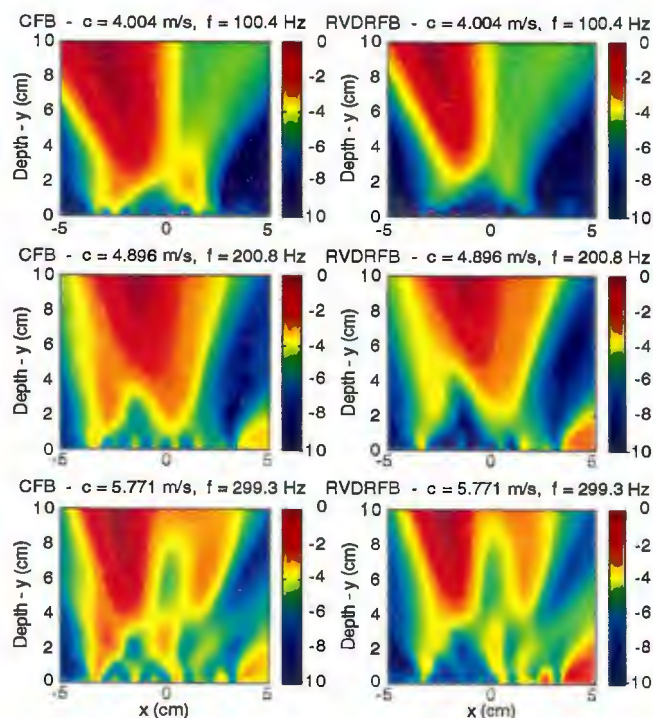


Figure B-37. Image of Data Set 907: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 907_16_1024.csd
 Runname: 907_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.203
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.516
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 5.594
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 3.789
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.922
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.172
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

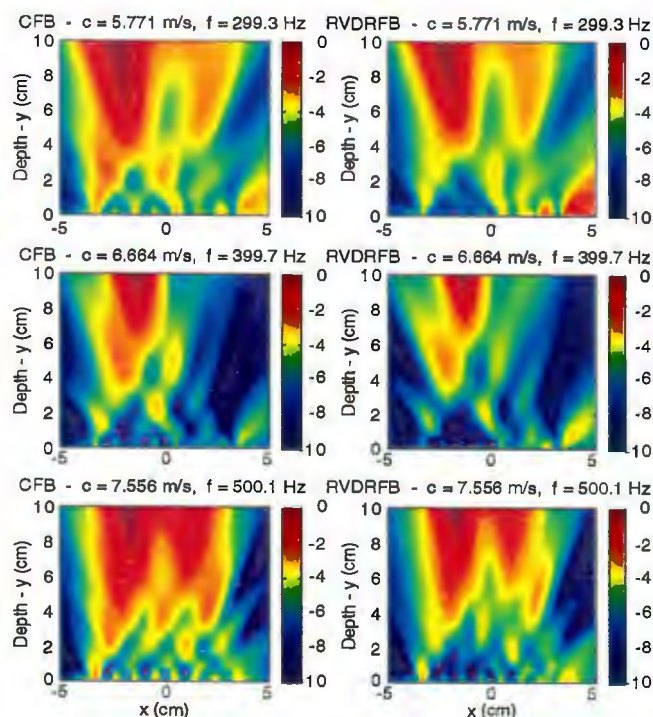


Figure B-38. Image of Data Set 907: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 907_32_512.csd
 Runname: 907_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.185
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 6.541
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.528
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 3.203
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.095
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.576
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

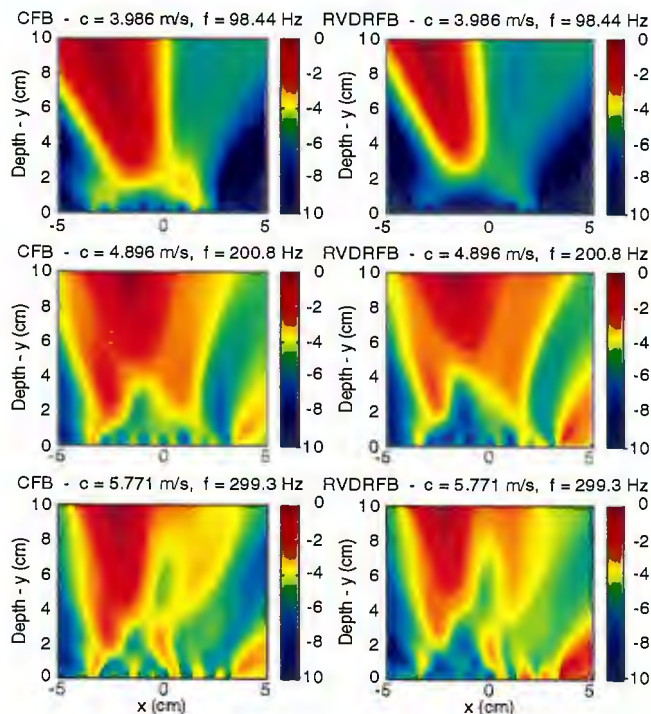


Figure B-39. Image of Data Set 907: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 907_32_512.csd
 Runname: 907_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.095
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.576
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.299
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.721
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.679
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.833
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

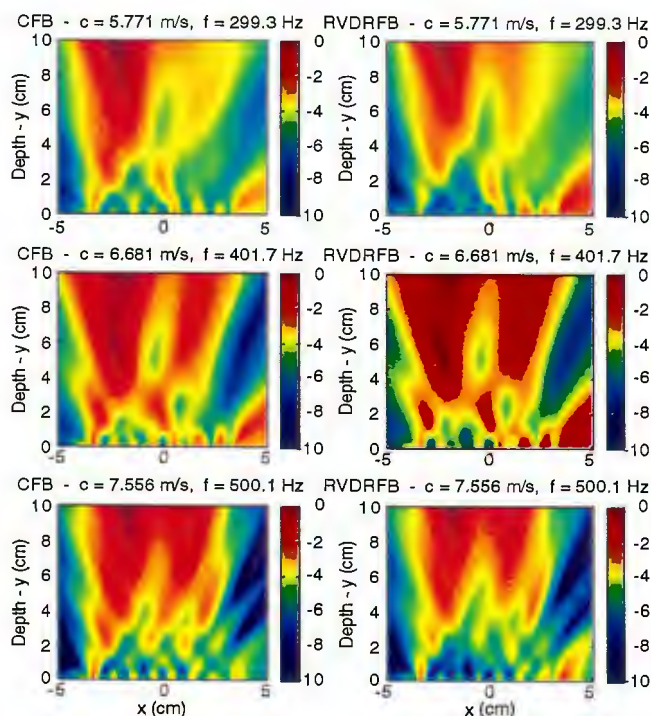


Figure B-40. Image of Data Set 907: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 907_64_256.csd
 Runname: 907_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.653
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 10
 RVDR Surface Normalization (dB): 6.291
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.496
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 4.202
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.773
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.37
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

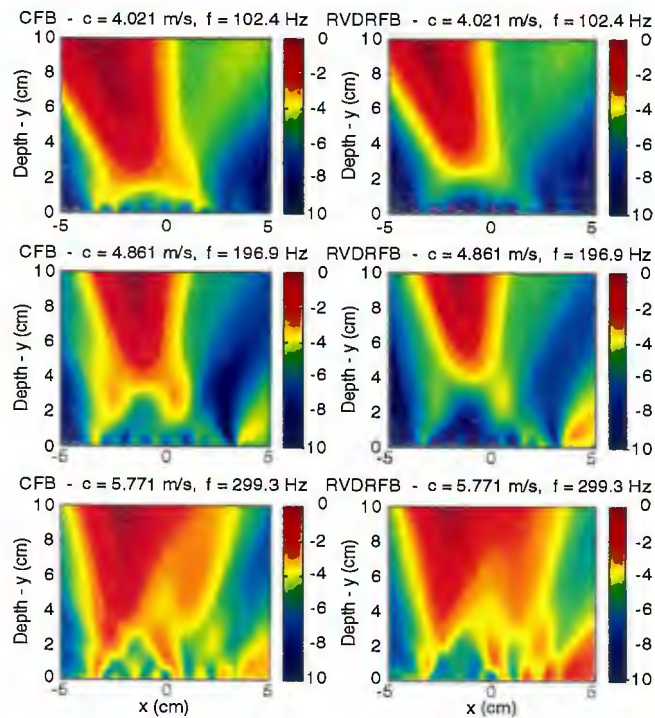


Figure B-41. Image of Data Set 907: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 907_64_256.csd
 Runname: 907_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.773
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.37
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.391
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.977
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.191
 CFB Surface Maximum Location
 X (cm): 0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.364
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

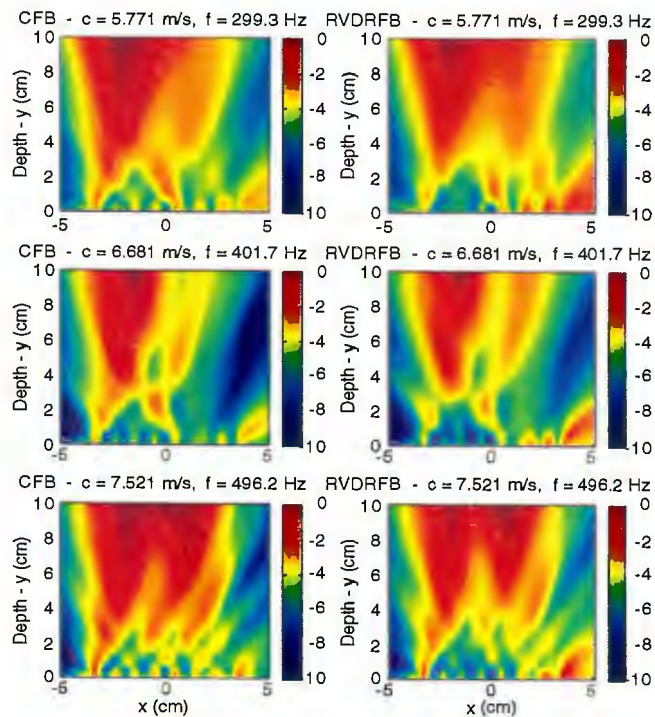


Figure B-42. Image of Data Set 907: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 908_16_1024.csd
 Runname: 908_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.922
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 9.596
 RVDR Surface Normalization (dB): 5.023
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 9.798

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.615
 CFB Surface Maximum Location
 X (cm): -4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 2.711
 RVDR Surface Maximum Location
 X (cm): -4.388 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.775
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 3.022
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

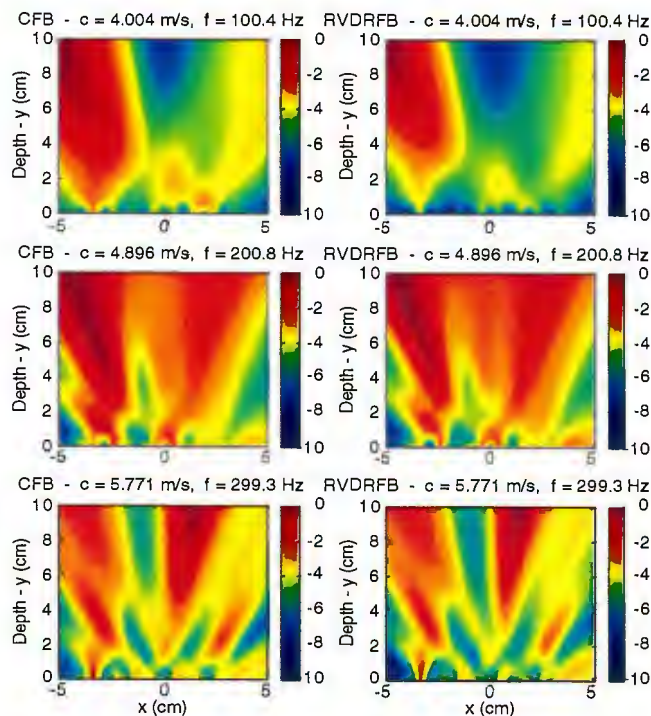


Figure B-43. Image of Data Set 908: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 908_16_1024.csd
 Runname: 908_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.775
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 3.022
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.644
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 9.798
 RVDR Surface Normalization (dB): 3.015
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 8.99

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.153
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.152
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

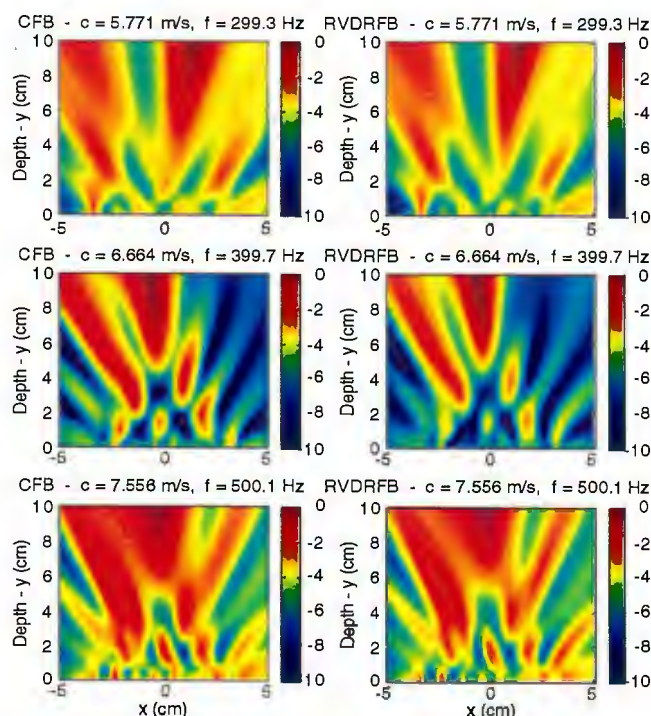


Figure B-44. Image of Data Set 908: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 908_32_512.csd
 Runname: 908_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.351
 CFB Surface Maximum Location
 X (cm): -4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 4.913
 RVDR Surface Maximum Location
 X (cm): -4.388 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.335
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 5.151
 RVDR Surface Normalization (dB): 3.86
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 5.151

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.876
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.37
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

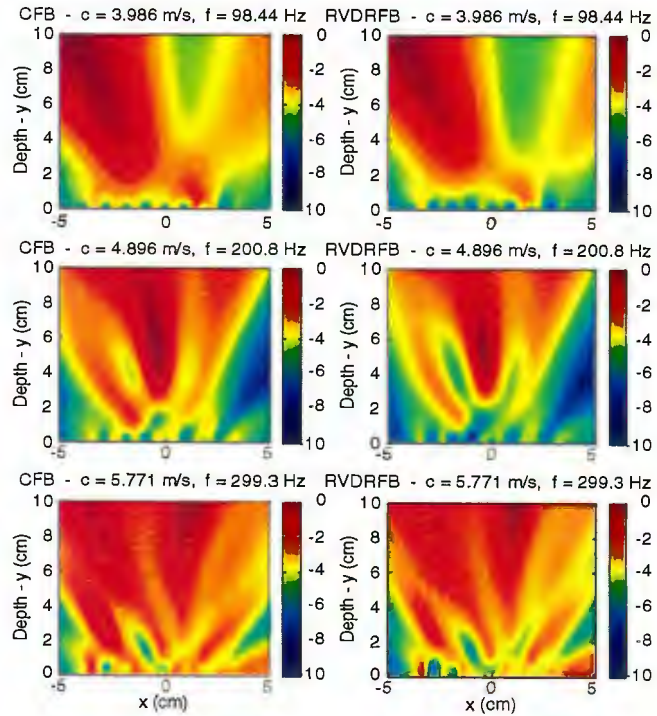


Figure B-45. Image of Data Set 908: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 908_32_512.csd
 Runname: 908_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.876
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.37
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.098
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 4.545
 RVDR Surface Normalization (dB): 2.656
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 4.343

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.167
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.249
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

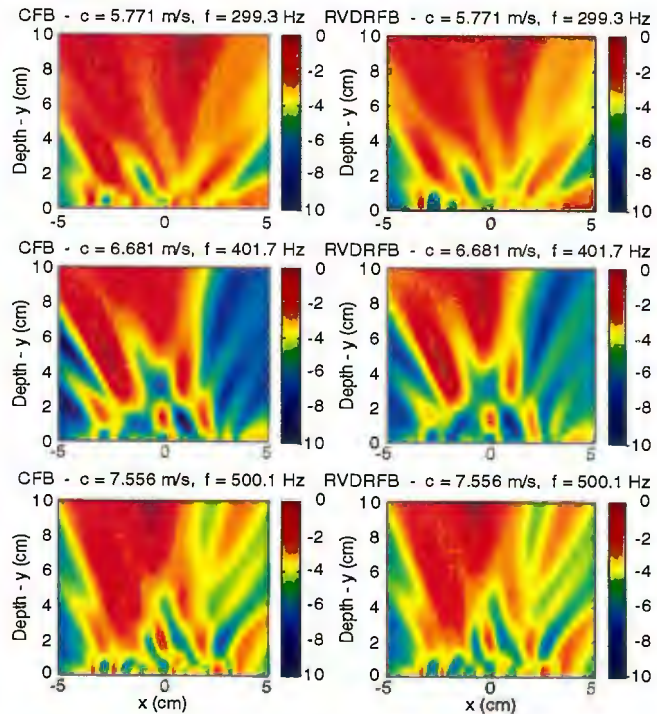


Figure B-46. Image of Data Set 908: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 908_64_256.csd
 Runname: 908_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.767
 CFB Surface Maximum Location
 X (cm): -4.592 Y (cm): 10
 RVDR Surface Normalization (dB): 5.253
 RVDR Surface Maximum Location
 X (cm): -4.388 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.577
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 5.353
 RVDR Surface Normalization (dB): 3.007
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 5.353

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.391
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 2.929
 RVDR Surface Normalization (dB): 1.769
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

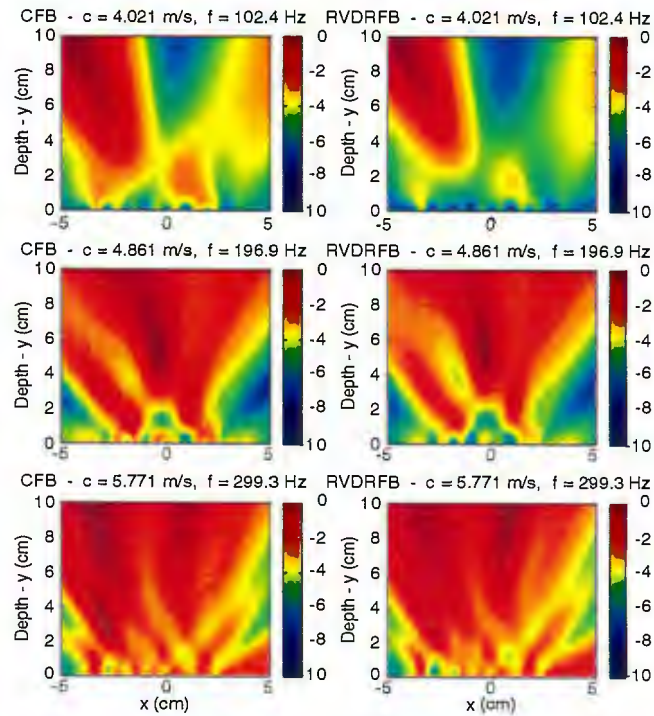


Figure B-47. Image of Data Set 908: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 908_64_256.csd
 Runname: 908_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.391
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 2.929
 RVDR Surface Normalization (dB): 1.769
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.742
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.313
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 9.394

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.231
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.724
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

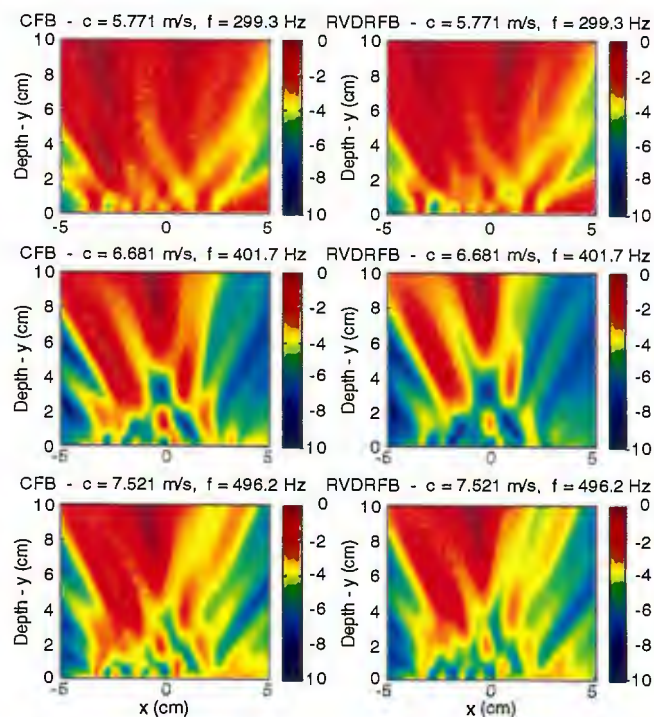


Figure B-48. Image of Data Set 908: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 909_16_1024.csd
 Runname: 909_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.717
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 7.98
 RVDR Surface Normalization (dB): 4.264
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 7.98

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.451
 CFB Surface Maximum Location
 X (cm): -4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 4.587
 RVDR Surface Maximum Location
 X (cm): -4.184 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.822
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.956
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

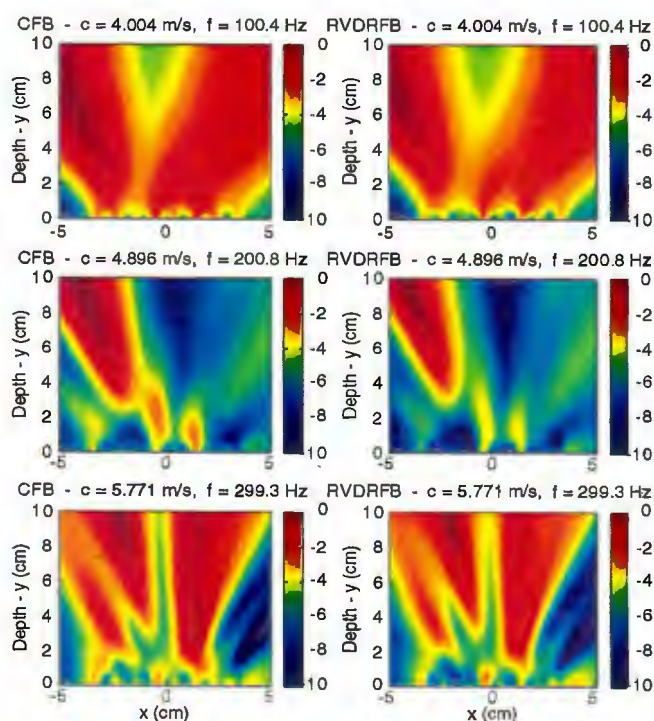


Figure B-49. Image of Data Set 909: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 909_16_1024.csd
 Runname: 909_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.822
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.956
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.861
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.786
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.388
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 3.303
 RVDR Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10

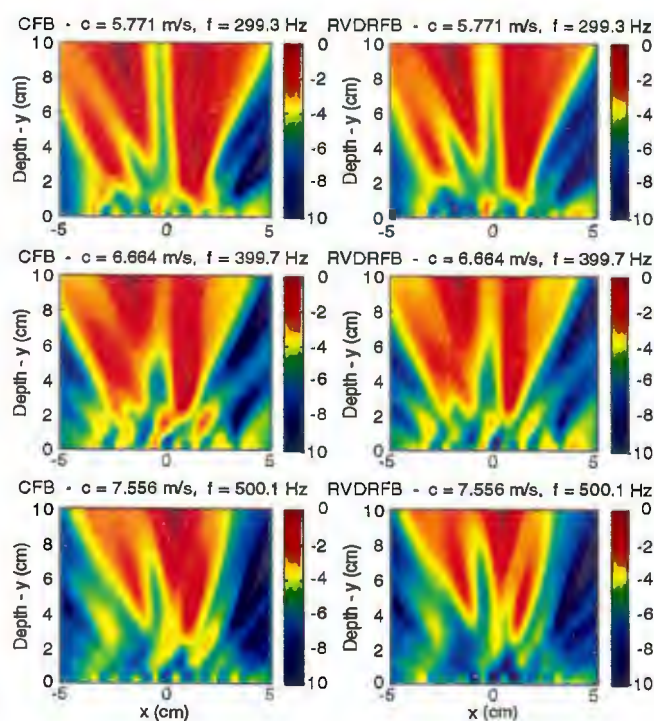


Figure B-50. Image of Data Set 909: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 909_32_512.csd
 Runname: 909_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.561
 CFB Surface Maximum Location
 X (cm): 5 Y (cm): 10
 RVDR Surface Normalization (dB): 3.888
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.84
 CFB Surface Maximum Location
 X (cm): -3.571 Y (cm): 7.576
 RVDR Surface Normalization (dB): 4.103
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 8.384

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.567
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 3.535
 RVDR Surface Normalization (dB): 2.644
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 3.535

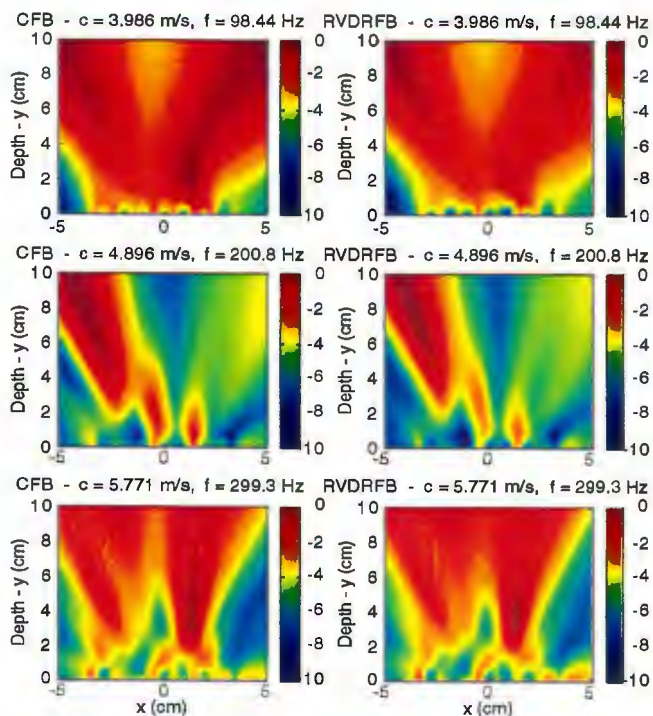


Figure B-51. Image of Data Set 909: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 909_32_512.csd
 Runname: 909_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.567
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 3.535
 RVDR Surface Normalization (dB): 2.644
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 3.535

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.426
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 3.526
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.686
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.358
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

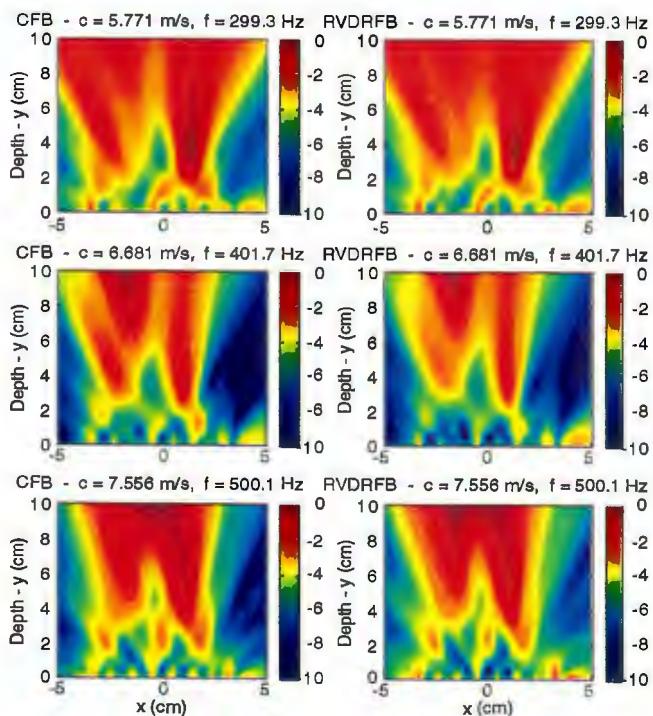


Figure B-52. Image of Data Set 909: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 909_64_256.csd
 Runname: 909_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.649
 CFB Surface Maximum Location
 X (cm): 5 Y (cm): 9.394
 RVDR Surface Normalization (dB): 3.674
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 8.788

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.875
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 8.364
 RVDR Surface Normalization (dB): 4.187
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 8.588

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.431
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 3.737
 RVDR Surface Normalization (dB): 2.646
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 3.535

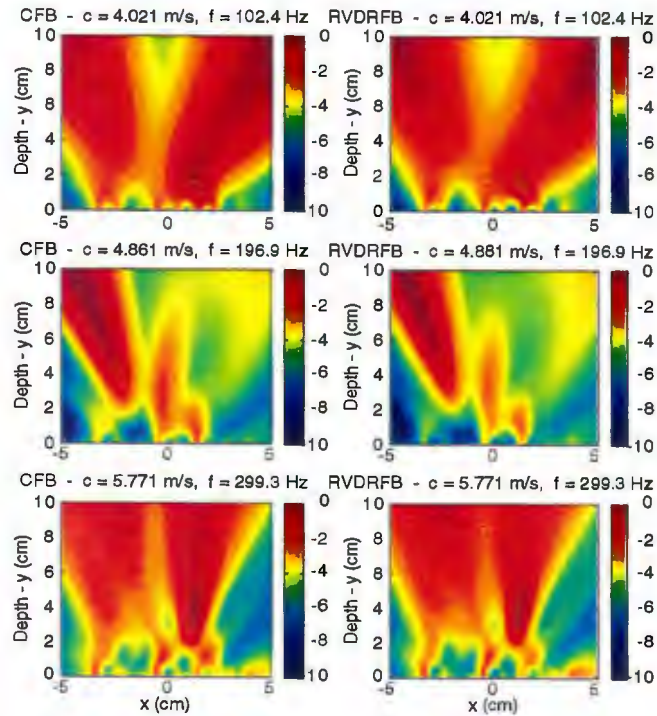


Figure B-53. Image of Data Set 909: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 909_64_256.csd
 Runname: 909_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.431
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 3.737
 RVDR Surface Normalization (dB): 2.646
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 3.535

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.482
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.623
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.998
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.301
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

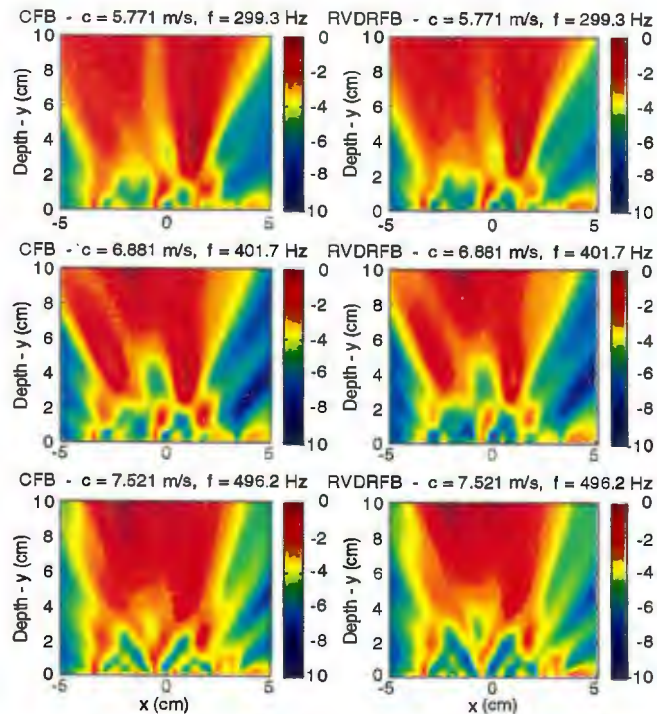


Figure B-54. Image of Data Set 909: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 910_16_1024.csd
 Runname: 910_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.677
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 1.716
 RVDR Surface Normalization (dB): 3.986
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 8.384

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.38
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 3.869
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.932
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 4.285
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

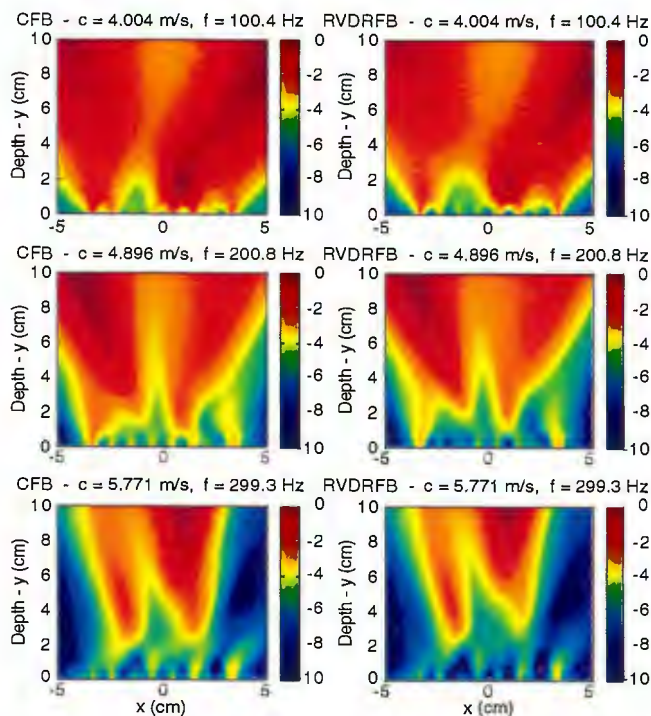


Figure B-55. Image of Data Set 910: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 910_16_1024.csd
 Runname: 910_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.932
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 4.285
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.088
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.753
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.916
 CFB Surface Maximum Location
 X (cm): 0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.236
 RVDR Surface Maximum Location
 X (cm): 0.102 Y (cm): 10

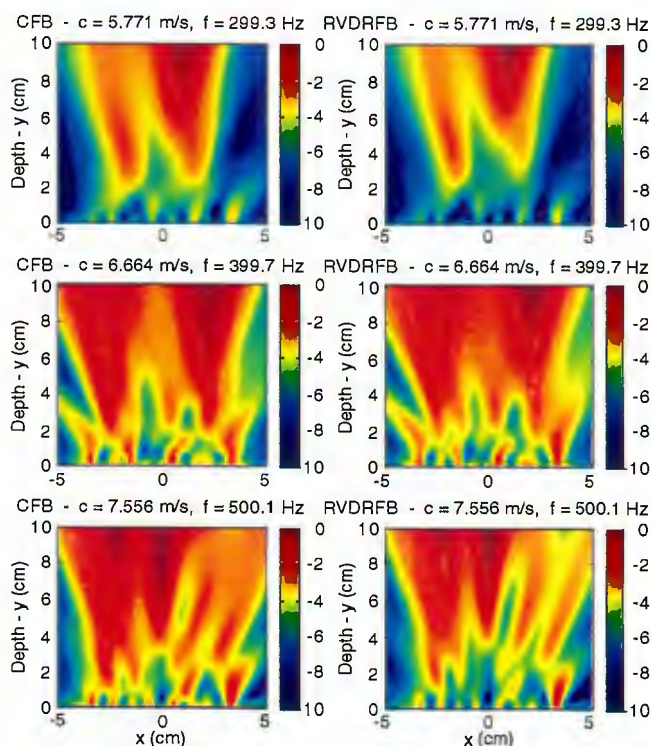


Figure B-56. Image of Data Set 910: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 910_32_512.csd
 Runname: 910_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.03
 CFB Surface Maximum Location
 X (cm): -4.796 Y (cm): 10
 RVDR Surface Normalization (dB): 4.344
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.453
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 3.976
 RVDR Surface Maximum Location
 X (cm): -4.184 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.69
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 4.31
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

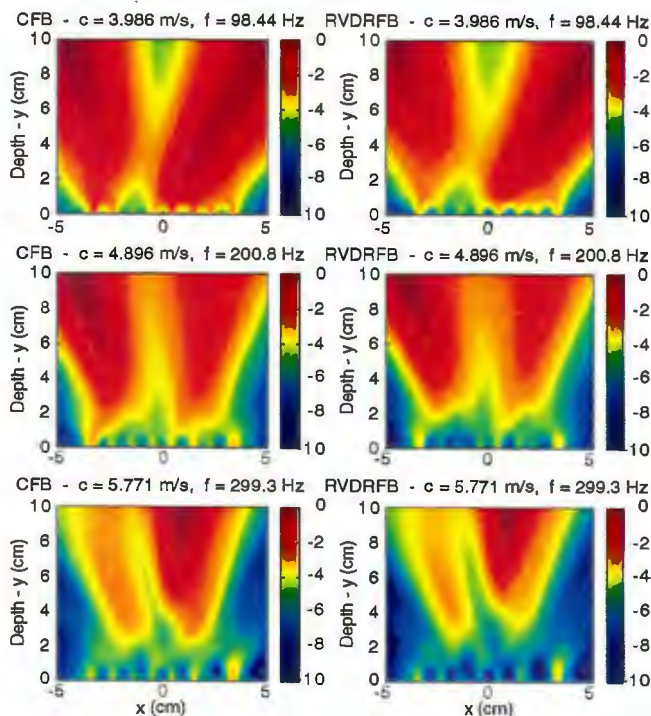


Figure B-57. Image of Data Set 910: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 910_32_512.csd
 Runname: 910_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.69
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 4.31
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.394
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.906
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.865
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.135
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

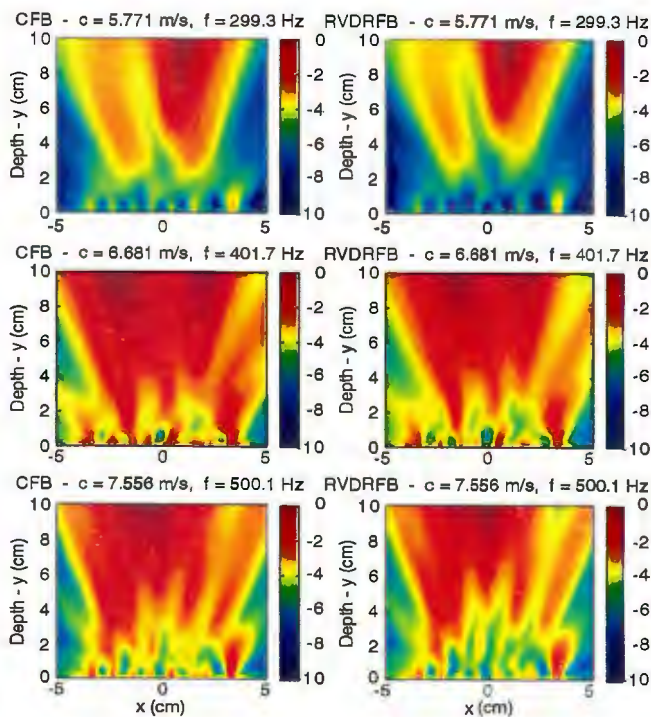


Figure B-58. Image of Data Set 910: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 910_64_256.csd
 Runname: 910_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.885
 CFB Surface Maximum Location
 X (cm): -4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 4.383
 RVDR Surface Maximum Location
 X (cm): -4.184 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.481
 CFB Surface Maximum Location
 X (cm): -3.571 Y (cm): 10
 RVDR Surface Normalization (dB): 2.988
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.039
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 3.548
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

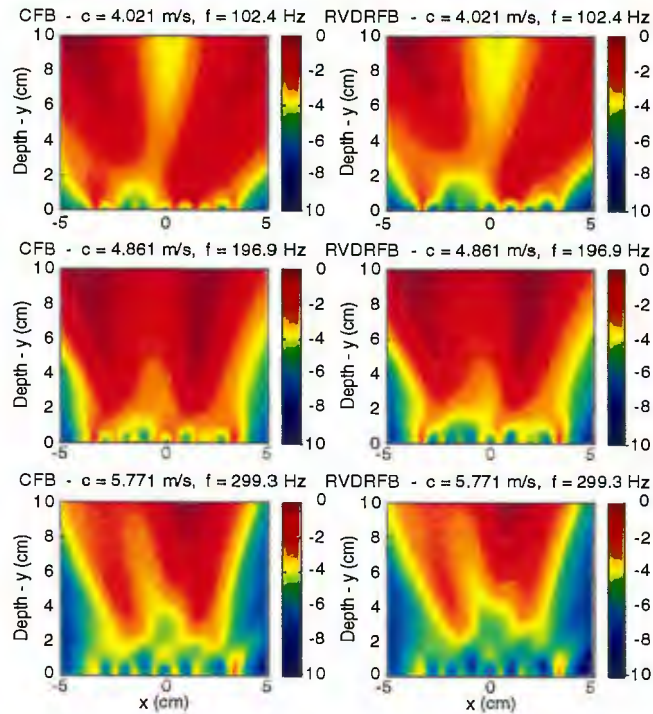


Figure B-59. Image of Data Set 910: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 910_64_256.csd
 Runname: 910_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.039
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 3.548
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.656
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.228
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.637
 CFB Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.067
 RVDR Surface Maximum Location
 X (cm): 0.102 Y (cm): 10

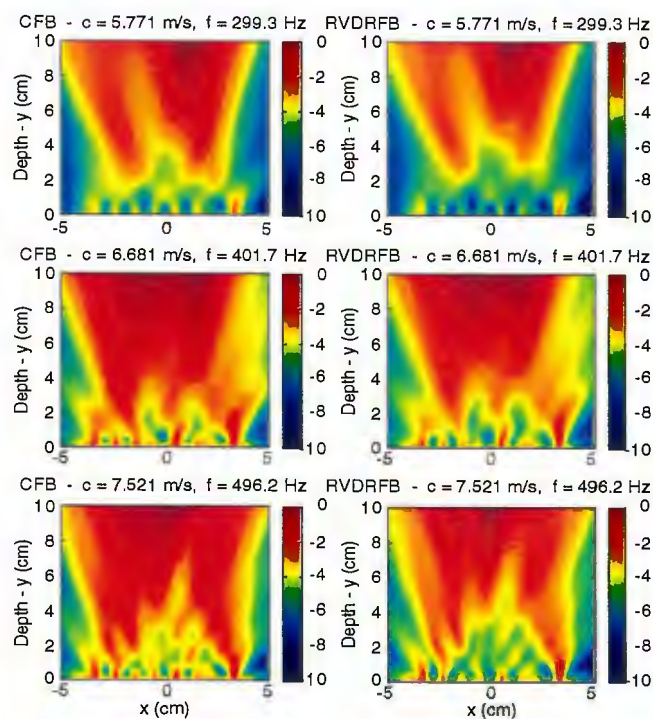


Figure B-60. Image of Data Set 910: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 911_16_1024.csd
 Runname: 911_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.298
 CFB Surface Maximum Location
 X (cm): -3.98 Y (cm): 10
 RVDR Surface Normalization (dB): 4.699
 RVDR Surface Maximum Location
 X (cm): -3.98 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.367
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 4.756
 RVDR Surface Maximum Location
 X (cm): 2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.153
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 3.033
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

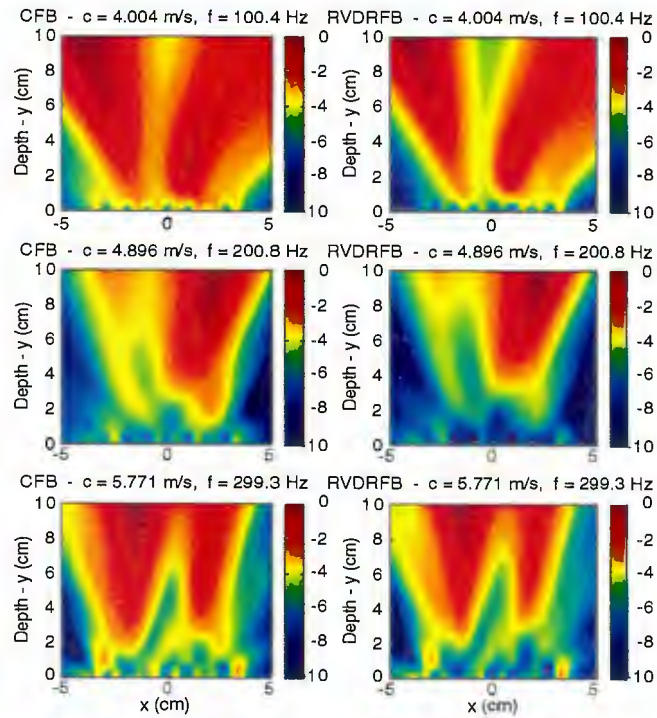


Figure B-61. Image of Data Set 911: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 911_16_1024.csd
 Runname: 911_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.153
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 3.033
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.668
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 9.596
 RVDR Surface Normalization (dB): 3.847
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.825
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 3.178
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

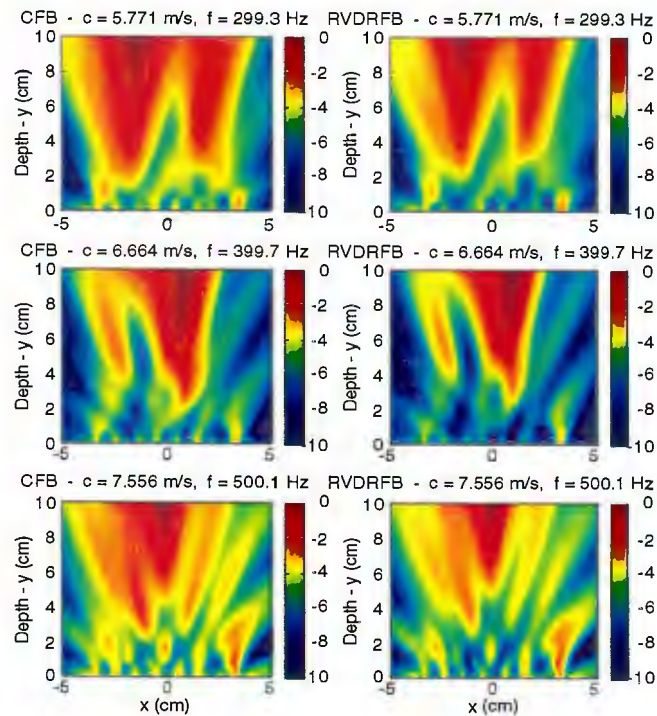


Figure B-62. Image of Data Set 911: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 911_32_512.csd
 Runname: 911_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.449
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 4.648
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.596
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 4.13
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.101
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.014
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

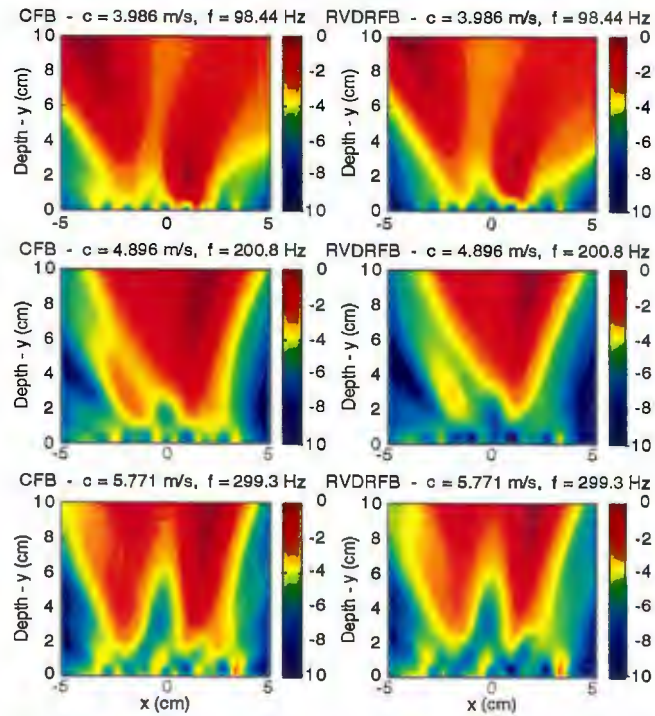


Figure B-63. Image of Data Set 911: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 911_32_512.csd
 Runname: 911_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 8

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.101
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.014
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.836
 CFB Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 3.311
 RVDR Surface Maximum Location
 X (cm): 0.3061 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.105
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 3.072
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

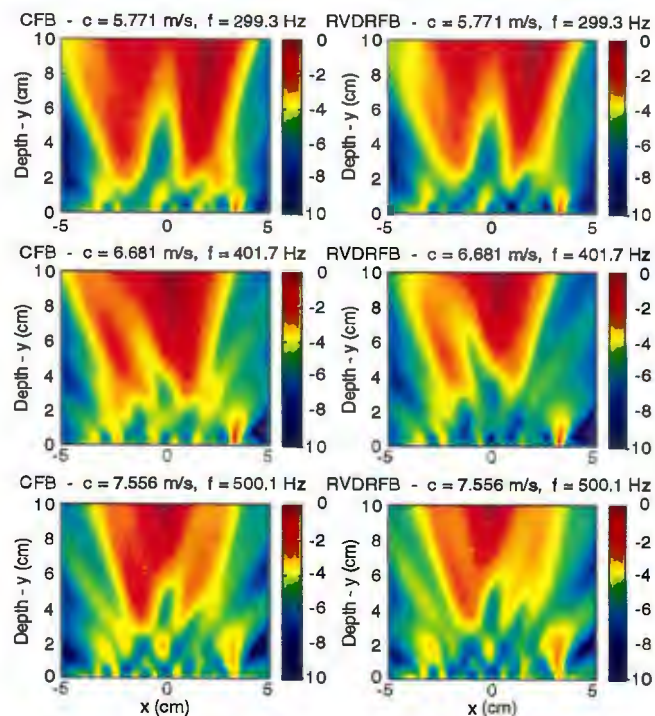


Figure B-64. Image of Data Set 911: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 911_64_256.csd
 Runname: 911_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.445
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 10
 RVDR Surface Normalization (dB): 4.831
 RVDR Surface Maximum Location
 X (cm): -3.571 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.657
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 3.87
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.737
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.634
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

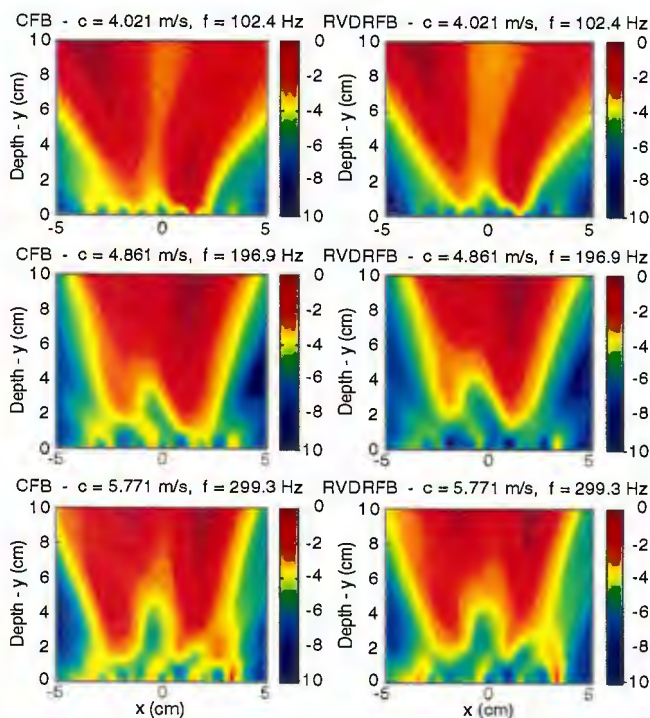


Figure B-65. Image of Data Set 911: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 911_64_256.csd
 Runname: 911_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.737
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.634
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.01
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 3.484
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.974
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.807
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

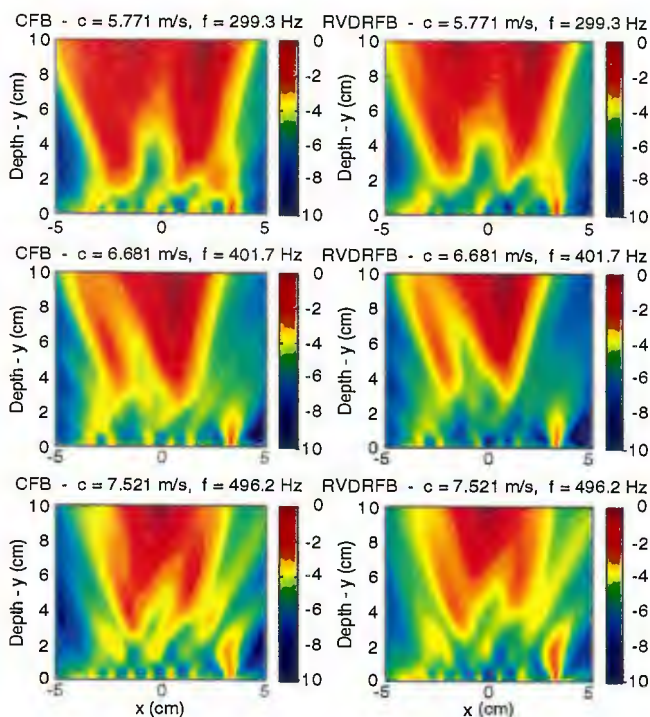


Figure B-66. Image of Data Set 911: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 912_16_1024.csd
 Runname: 912_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.943
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 8.586
 RVDR Surface Normalization (dB): 5.225
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 8.788

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.553
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 2.727
 RVDR Surface Normalization (dB): 2.939
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 2.727

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.46
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 3.45
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

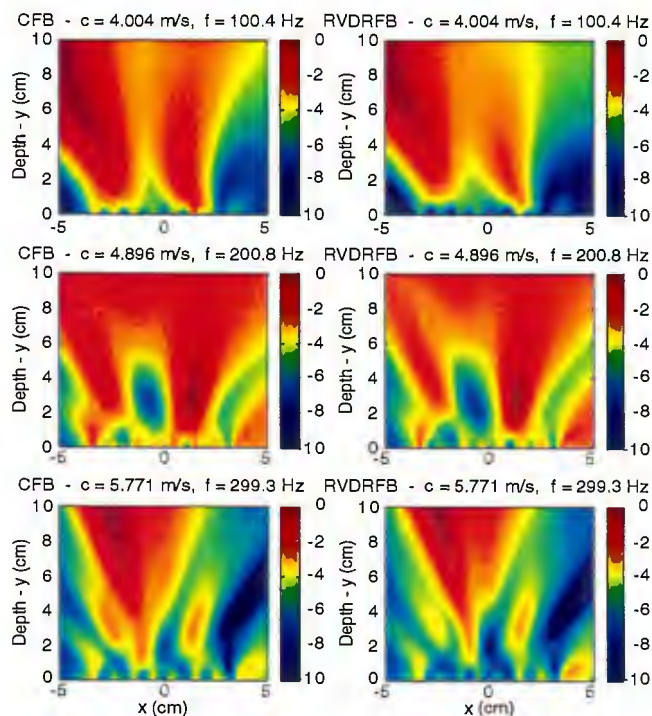


Figure B-67. Image of Data Set 912: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 912_16_1024.csd
 Runname: 912_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.46
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 3.45
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.474
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.358
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.672
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.792
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

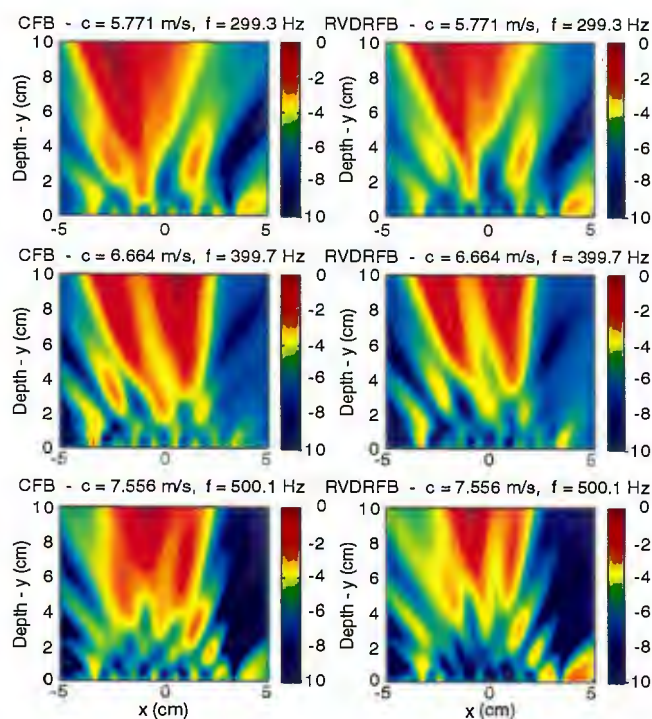


Figure B-68. Image of Data Set 912: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 912_32_512.csd
 Runname: 912_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.308
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 8.182
 RVDR Surface Normalization (dB): 5.704
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 8.182

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.977
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 2.524
 RVDR Surface Normalization (dB): 2.223
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 2.524

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.013
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 3.316
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

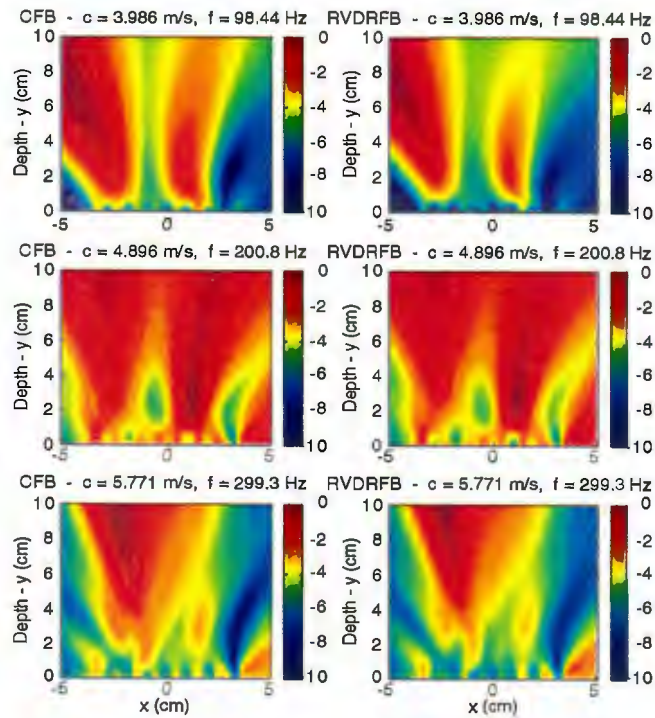


Figure B-69. Image of Data Set 912: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 912_32_512.csd
 Runname: 912_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.013
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 3.316
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.237
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 8.99
 RVDR Surface Normalization (dB): 2.423
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.143
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.323
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

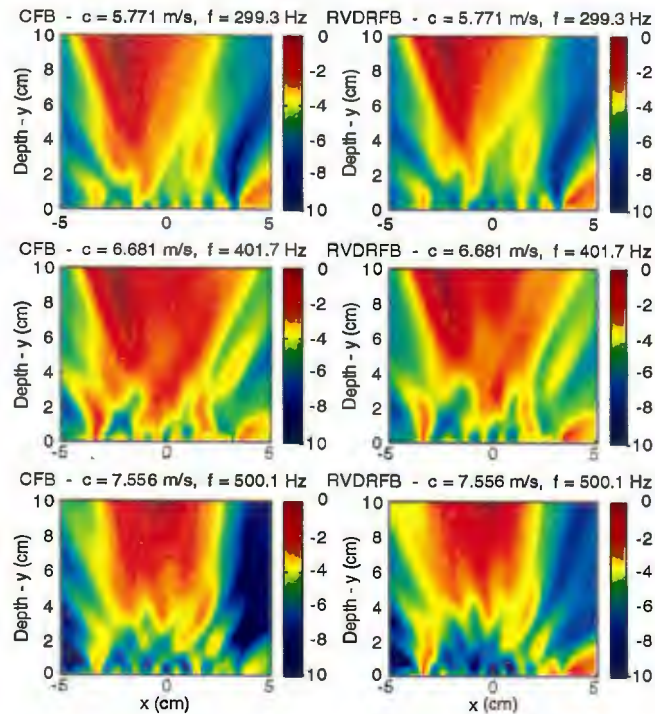


Figure B-70. Image of Data Set 912: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 912_64_256.csd
Runname: 912_64_256

Diastolic Phase
Spreading Parameter = 1
9 Channels Processed
Z Value of Cut (cm): 0
Wave Speed Interpolation
4 m/s at 100 Hz
12 m/s at 1000 Hz

Number of Temporal FFTs: 64
Number of Points per FFT: 256
Frequency Bin Resolution (Hz): 7.876
RVDR Enhancement (linear): 6

Frequency 100 Hz
CFB Surface Normalization (dB): 6.068
CFB Surface Maximum Location
X (cm): -5 Y (cm): 9.394
RVDR Surface Normalization (dB): 5.507
RVDR Surface Maximum Location
X (cm): -5 Y (cm): 9.394

Frequency 200 Hz
CFB Surface Normalization (dB): 2.389
CFB Surface Maximum Location
X (cm): -2.959 Y (cm): 5.151
RVDR Surface Normalization (dB): 1.684
RVDR Surface Maximum Location
X (cm): -3.163 Y (cm): 5.959

Frequency 300 Hz
CFB Surface Normalization (dB): 3.908
CFB Surface Maximum Location
X (cm): -2.347 Y (cm): 10
RVDR Surface Normalization (dB): 3.121
RVDR Surface Maximum Location
X (cm): -2.347 Y (cm): 10

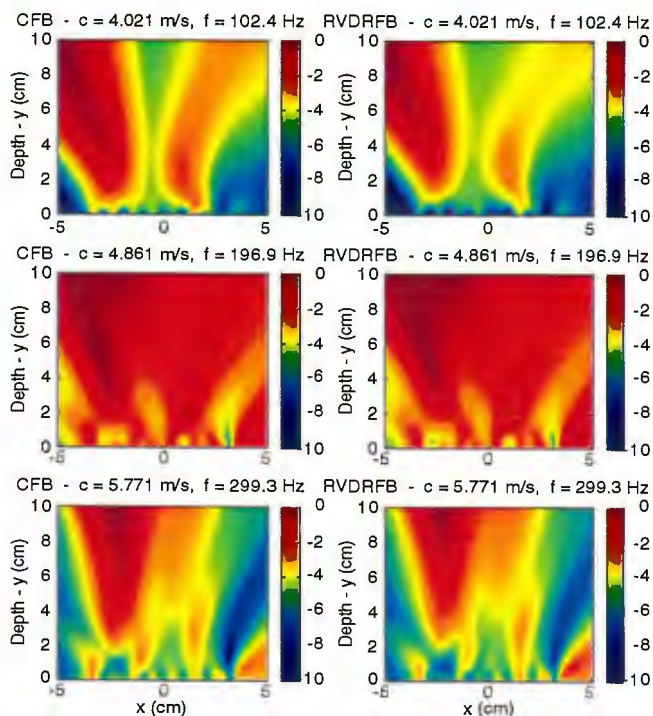


Figure B-71. Image of Data Set 912: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 912_64_256.csd
Runname: 912_64_256

Diastolic Phase
Spreading Parameter = 1
9 Channels Processed
Z Value of Cut (cm): 0
Wave Speed Interpolation
4 m/s at 100 Hz
12 m/s at 1000 Hz

Number of Temporal FFTs: 64
Number of Points per FFT: 256
Frequency Bin Resolution (Hz): 7.876
RVDR Enhancement (linear): 6

Frequency 300 Hz
CFB Surface Normalization (dB): 3.908
CFB Surface Maximum Location
X (cm): -2.347 Y (cm): 10
RVDR Surface Normalization (dB): 3.121
RVDR Surface Maximum Location
X (cm): -2.347 Y (cm): 10

Frequency 400 Hz
CFB Surface Normalization (dB): 3.385
CFB Surface Maximum Location
X (cm): -0.3061 Y (cm): 10
RVDR Surface Normalization (dB): 2.227
RVDR Surface Maximum Location
X (cm): -0.5102 Y (cm): 10

Frequency 500 Hz
CFB Surface Normalization (dB): 3.879
CFB Surface Maximum Location
X (cm): -0.3061 Y (cm): 10
RVDR Surface Normalization (dB): 1.17
RVDR Surface Maximum Location
X (cm): -0.3061 Y (cm): 10

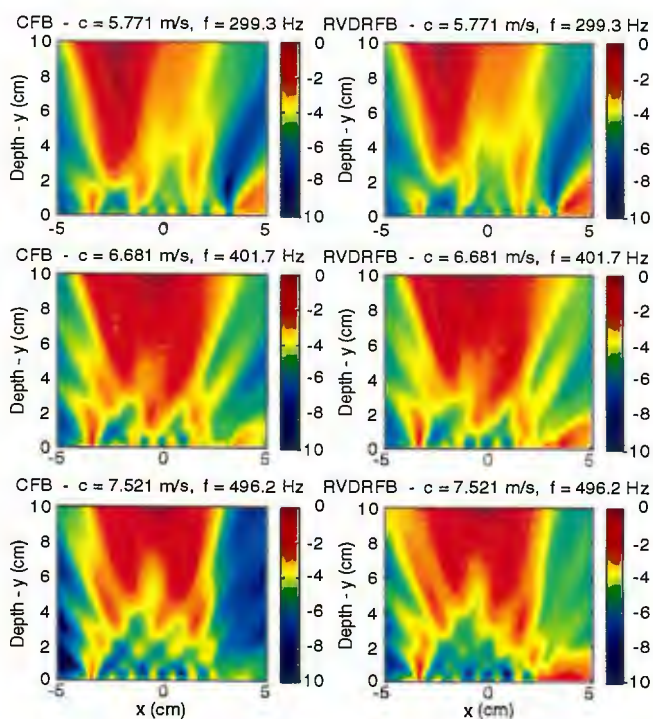


Figure B-72. Image of Data Set 912: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 913_16_1024.csd
 Runname: 913_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.928
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 4.153
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 6.565

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.781
 CFB Surface Maximum Location
 X (cm): 5 Y (cm): 4.141
 RVDR Surface Normalization (dB): 2.393
 RVDR Surface Maximum Location
 X (cm): 5 Y (cm): 4.141

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.802
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 3.131
 RVDR Surface Normalization (dB): 2.171
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 3.131

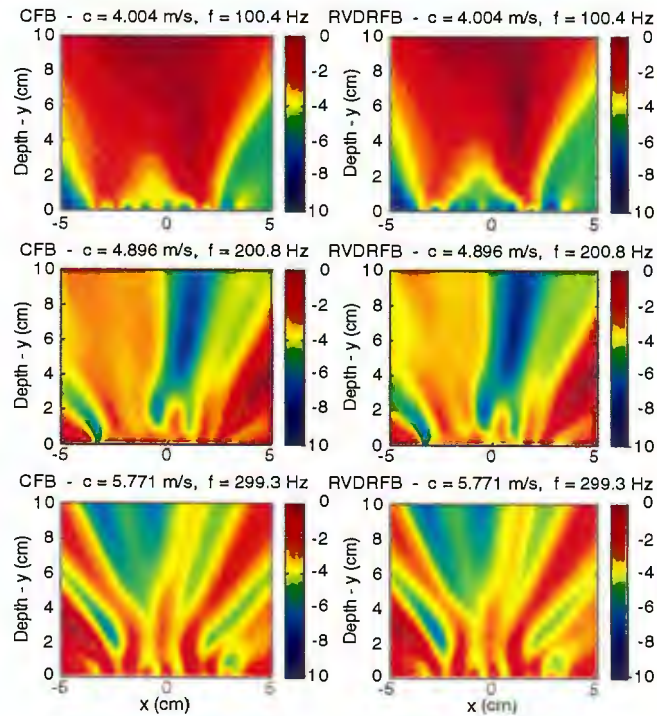


Figure B-73. Image of Data Set 913: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 913_16_1024.csd
 Runname: 913_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.802
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 3.131
 RVDR Surface Normalization (dB): 2.171
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 3.131

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.921
 CFB Surface Maximum Location
 X (cm): 3.163 Y (cm): 1.312
 RVDR Surface Normalization (dB): 2.362
 RVDR Surface Maximum Location
 X (cm): 3.163 Y (cm): 1.312

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.755
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 2.727
 RVDR Surface Normalization (dB): 2.231
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 2.727

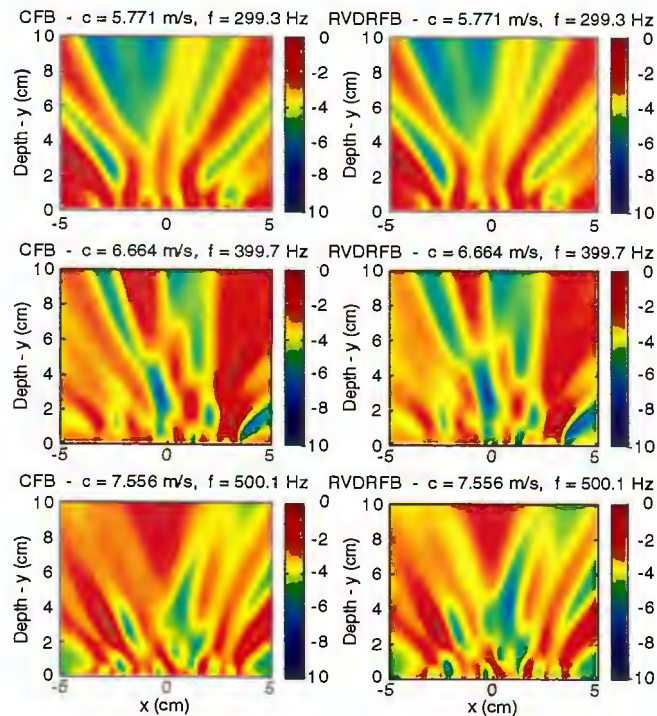


Figure B-74. Image of Data Set 913: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 913_32_512.csd
 Runname: 913_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.32
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 4.909
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.721
 CFB Surface Maximum Location
 X (cm): 4.592 Y (cm): 2.929
 RVDR Surface Normalization (dB): 2.516
 RVDR Surface Maximum Location
 X (cm): 4.592 Y (cm): 2.929

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.091
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 2.929
 RVDR Surface Normalization (dB): 1.762
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 2.929

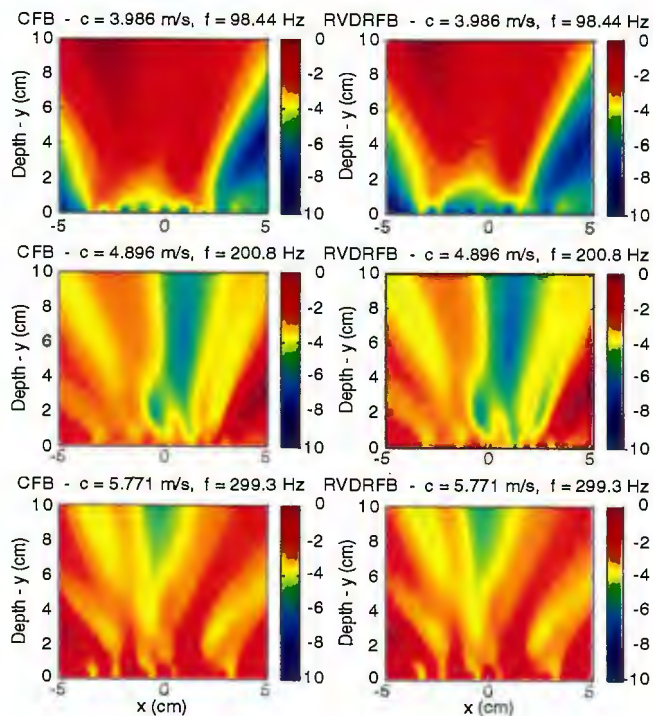


Figure B-75. Image of Data Set 913: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 913_32_512.csd
 Runname: 913_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.091
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 2.929
 RVDR Surface Normalization (dB): 1.762
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 2.929

Frequency 400 Hz
 CFB Surface Normalization (dB): 1.961
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 3.131
 RVDR Surface Normalization (dB): 1.686
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 3.131

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.018
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.376
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

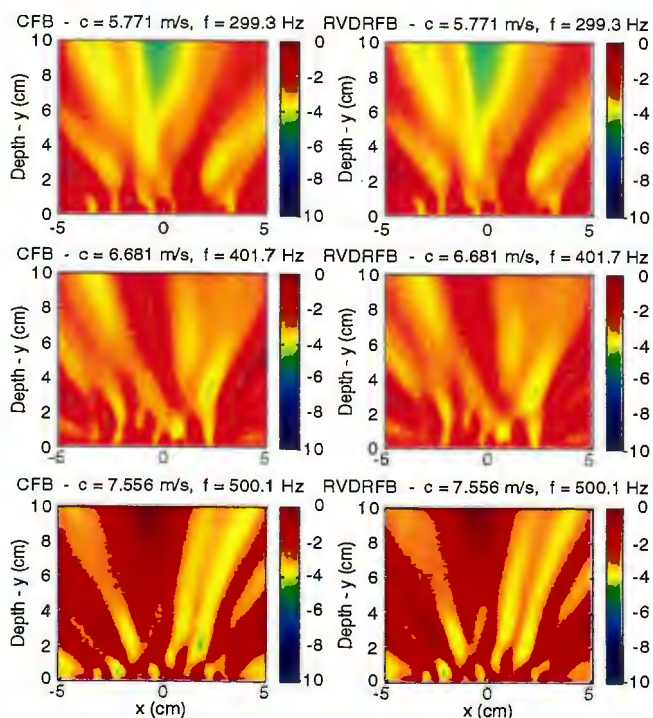


Figure B-76. Image of Data Set 913: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 913_64_256.csd
 Runname: 913_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.905
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 4.541
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 2.312
 CFB Surface Maximum Location
 X (cm): 3.776 Y (cm): 1.918
 RVDR Surface Normalization (dB): 2.068
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 1.918

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.095
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 2.524
 RVDR Surface Normalization (dB): 1.888
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 2.524

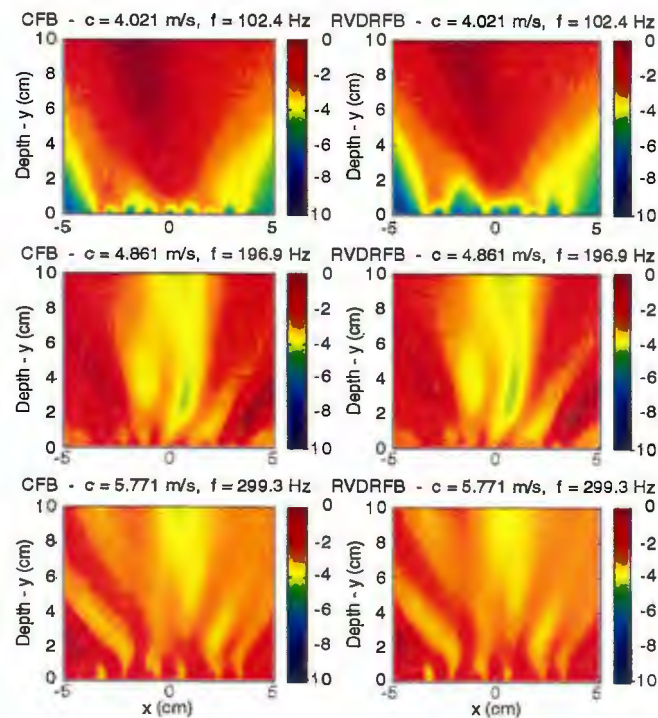


Figure B-77. Image of Data Set 913: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 913_64_256.csd
 Runname: 913_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.095
 CFB Surface Maximum Location
 X (cm): -5 Y (cm): 2.524
 RVDR Surface Normalization (dB): 1.888
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 2.524

Frequency 400 Hz
 CFB Surface Normalization (dB): 1.803
 CFB Surface Maximum Location
 X (cm): 3.163 Y (cm): 0.9082
 RVDR Surface Normalization (dB): 1.631
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 3.131

Frequency 500 Hz
 CFB Surface Normalization (dB): 1.575
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.255
 RVDR Surface Maximum Location
 X (cm): 3.571 Y (cm): 1.312

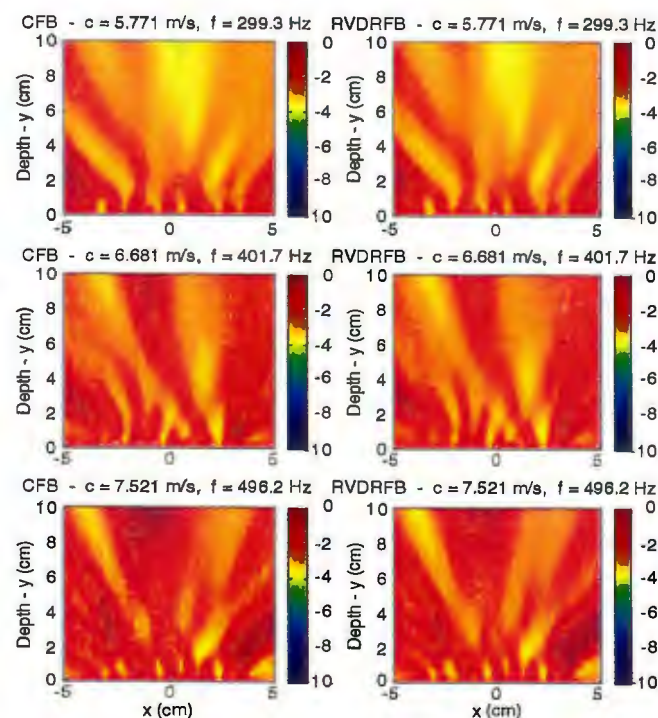


Figure B-78. Image of Data Set 913: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 914_16_1024.csd

Runname: 914_16_1024

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 5.693

CFB Surface Maximum Location

X (cm): -3.571 Y (cm): 8.788

RVDR Surface Normalization (dB): 4.635

RVDR Surface Maximum Location

X (cm): -4.184 Y (cm): 10

Frequency 200 Hz

CFB Surface Normalization (dB): 6.19

CFB Surface Maximum Location

X (cm): -2.755 Y (cm): 9.192

RVDR Surface Normalization (dB): 5.44

RVDR Surface Maximum Location

X (cm): -2.755 Y (cm): 9.192

Frequency 300 Hz

CFB Surface Normalization (dB): 4.986

CFB Surface Maximum Location

X (cm): 1.735 Y (cm): 10

RVDR Surface Normalization (dB): 3.06

RVDR Surface Maximum Location

X (cm): 1.735 Y (cm): 10

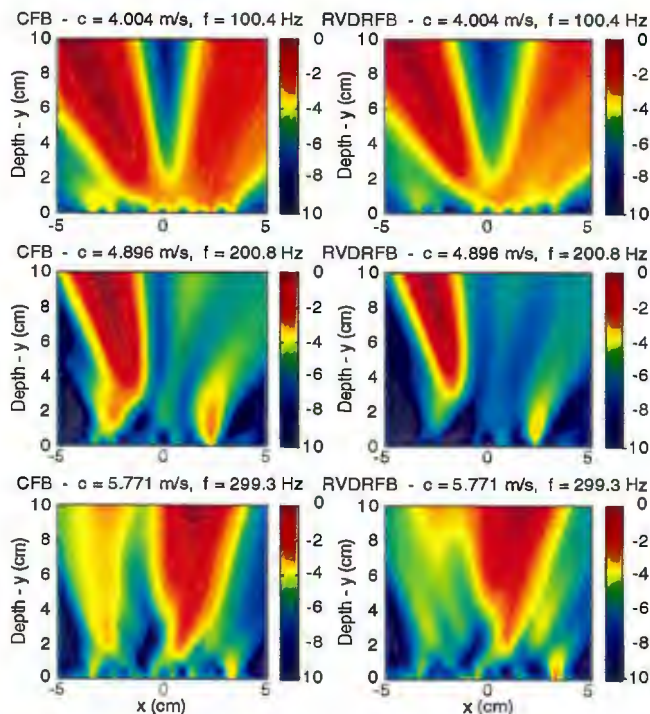


Figure B-79. Image of Data Set 914: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 914_16_1024.csd

Runname: 914_16_1024

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 4.986

CFB Surface Maximum Location

X (cm): 1.735 Y (cm): 10

RVDR Surface Normalization (dB): 3.06

RVDR Surface Maximum Location

X (cm): 1.735 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 3.84

CFB Surface Maximum Location

X (cm): -0.7143 Y (cm): 10

RVDR Surface Normalization (dB): 3.203

RVDR Surface Maximum Location

X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 3.545

CFB Surface Maximum Location

X (cm): 1.122 Y (cm): 10

RVDR Surface Normalization (dB): 2.222

RVDR Surface Maximum Location

X (cm): 0.9184 Y (cm): 10

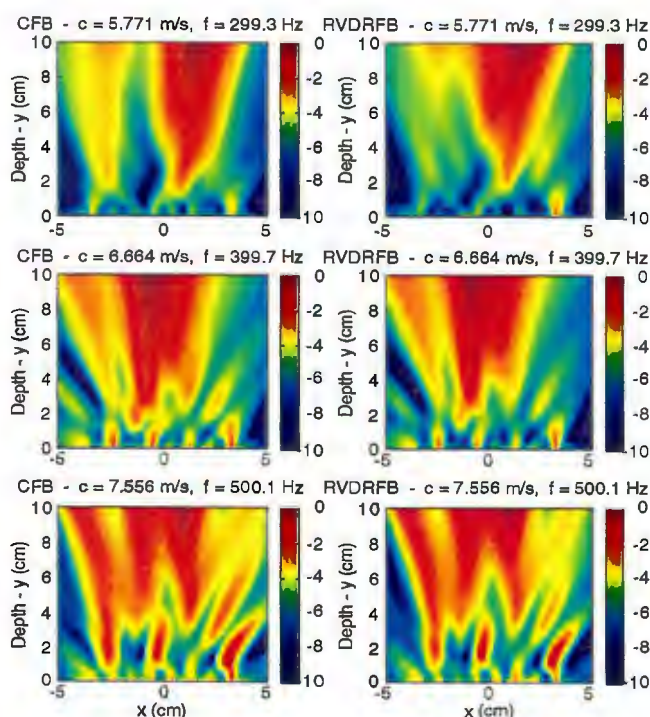


Figure B-80. Image of Data Set 914: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 914_32_512.csd
 Runname: 914_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.287
 CFB Surface Maximum Location
 X (cm): -4.796 Y (cm): 10
 RVDR Surface Normalization (dB): 4.526
 RVDR Surface Maximum Location
 X (cm): -5 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.536
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 8.384
 RVDR Surface Normalization (dB): 4.758
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 8.788

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.162
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.425
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

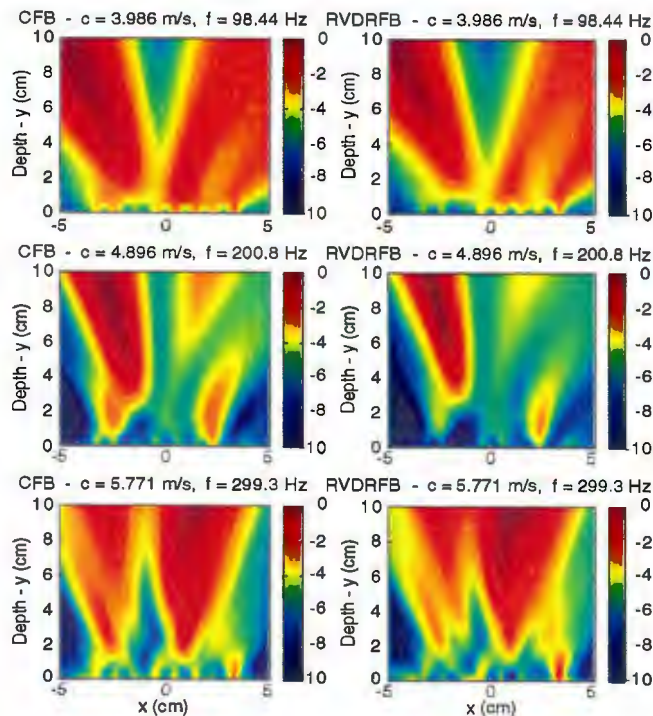


Figure B-81. Image of Data Set 914: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 914_32_512.csd
 Runname: 914_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.162
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.425
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.967
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.336
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.58
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.736
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

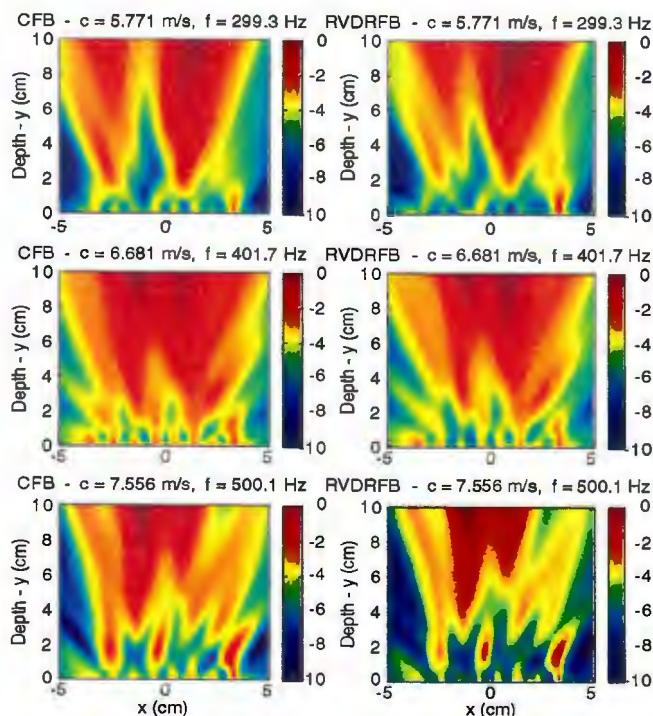


Figure B-82. Image of Data Set 914: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 914_84_256.csd
 Runname: 914_84_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.771
 CFB Surface Maximum Location
 X (cm): 4.592 Y (cm): 10
 RVDR Surface Normalization (dB): 3.546
 RVDR Surface Maximum Location
 X (cm): 4.796 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.601
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 8.788
 RVDR Surface Normalization (dB): 4.186
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 9.394

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.224
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.333
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

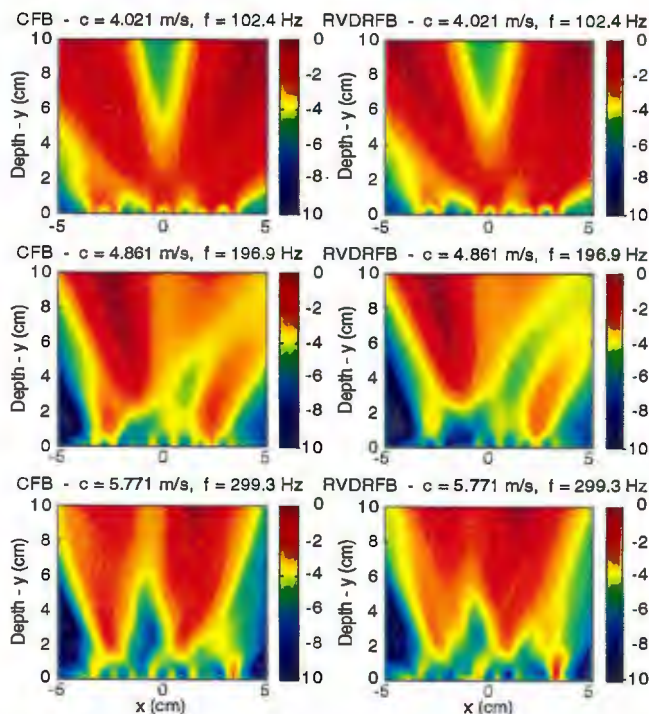


Figure B-83. Image of Data Set 914: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 914_64_256.csd
 Runname: 914_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.224
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.333
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.281
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 3.662
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.709
 CFB Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 2.716
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

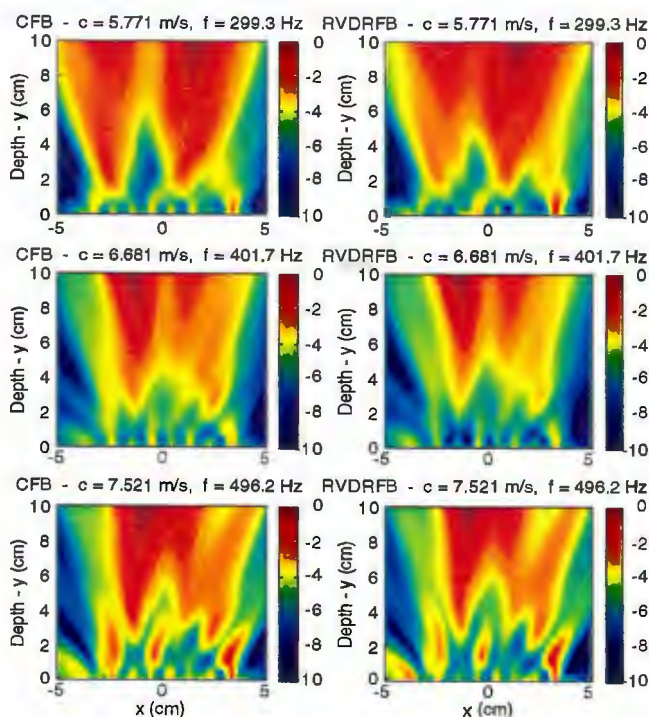


Figure B-84. Image of Data Set 914: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 915_16_1024.csd
 Runname: 915_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.008
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 5.757
 RVDR Surface Normalization (dB): 4.061
 RVDR Surface Maximum Location
 X (cm): 2.959 Y (cm): 8.586

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.75
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 4.949
 RVDR Surface Normalization (dB): 4.177
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 4.949

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.604
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 7.373
 RVDR Surface Normalization (dB): 2.736
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 9.798

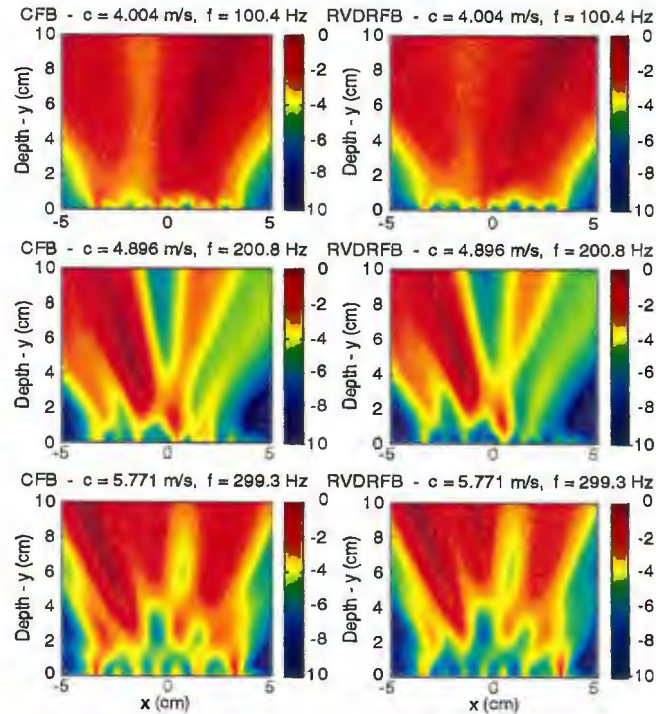


Figure B-85. Image of Data Set 915: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 915_16_1024.csd
 Runname: 915_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.604
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 7.373
 RVDR Surface Normalization (dB): 2.736
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 9.798

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.967
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 2.635
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.71
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.98
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

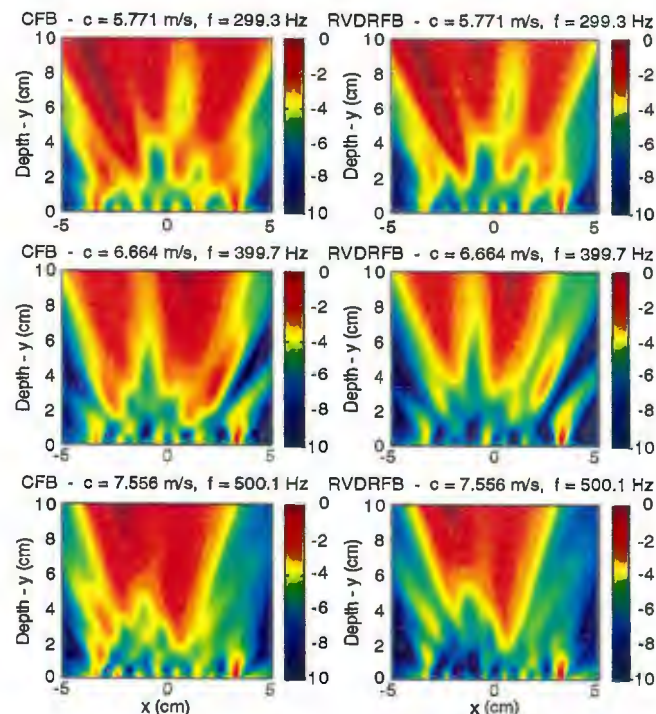


Figure B-86. Image of Data Set 915: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 915_32_512.csd
 Runname: 915_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.287
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 4.882
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.418
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 7.98
 RVDR Surface Normalization (dB): 3.866
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 7.98

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.126
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.678
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

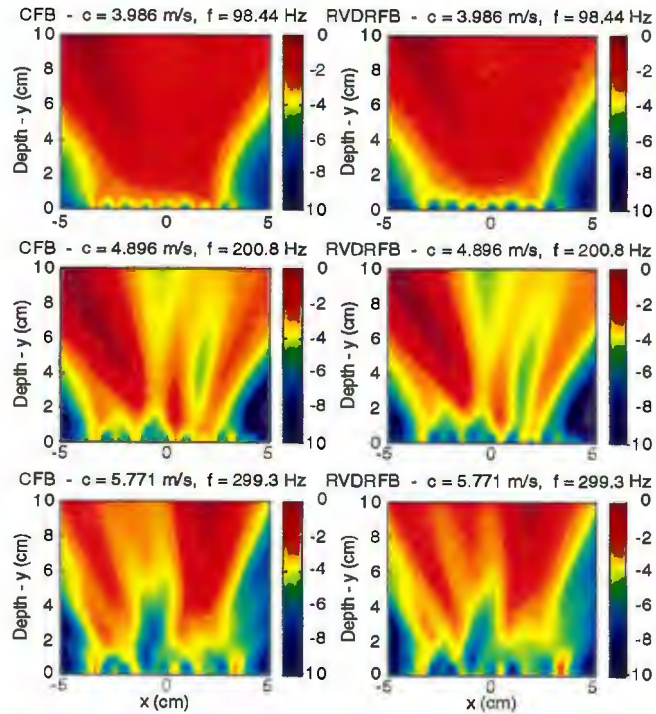


Figure B-87. Image of Data Set 915: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 915_32_512.csd
 Runname: 915_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.126
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.678
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.958
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.217
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.88
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.961
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

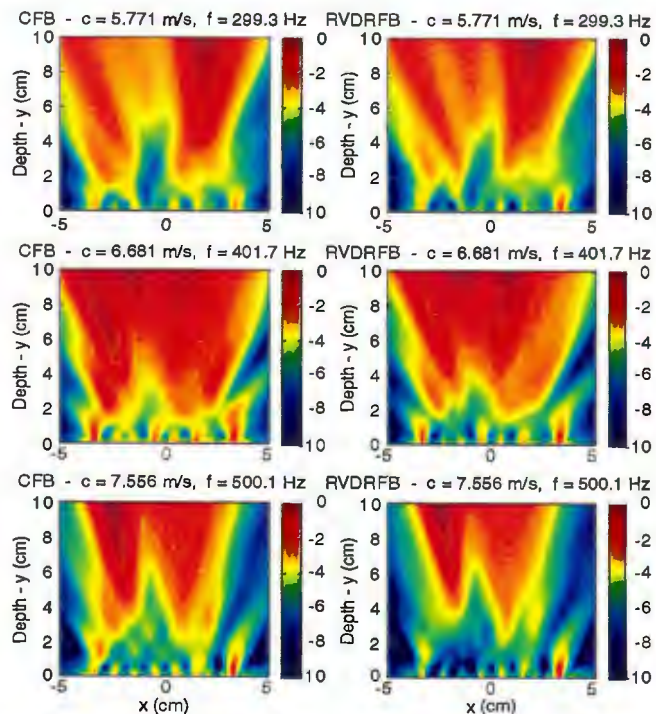


Figure B-88. Image of Data Set 915: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 915_64_256.csd
 Runname: 915_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.673
 CFB Surface Maximum Location
 X (cm): -4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 4.22
 RVDR Surface Maximum Location
 X (cm): -4.388 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.948
 CFB Surface Maximum Location
 X (cm): -3.776 Y (cm): 9.798
 RVDR Surface Normalization (dB): 4.55
 RVDR Surface Maximum Location
 X (cm): -3.776 Y (cm): 9.798

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.07
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.687
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

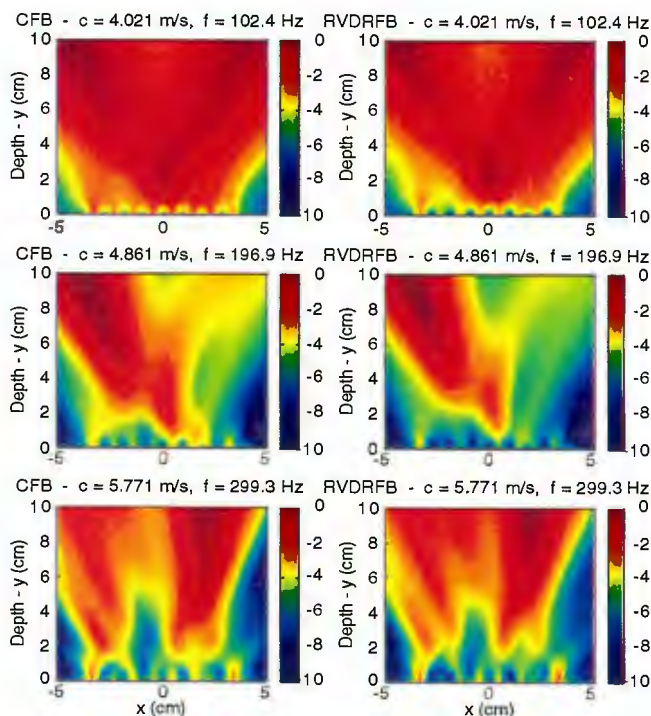


Figure B-89. Image of Data Set 915: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 915_64_256.csd
 Runname: 915_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.07
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.687
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.867
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 3.039
 RVDR Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.328
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 2.526
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

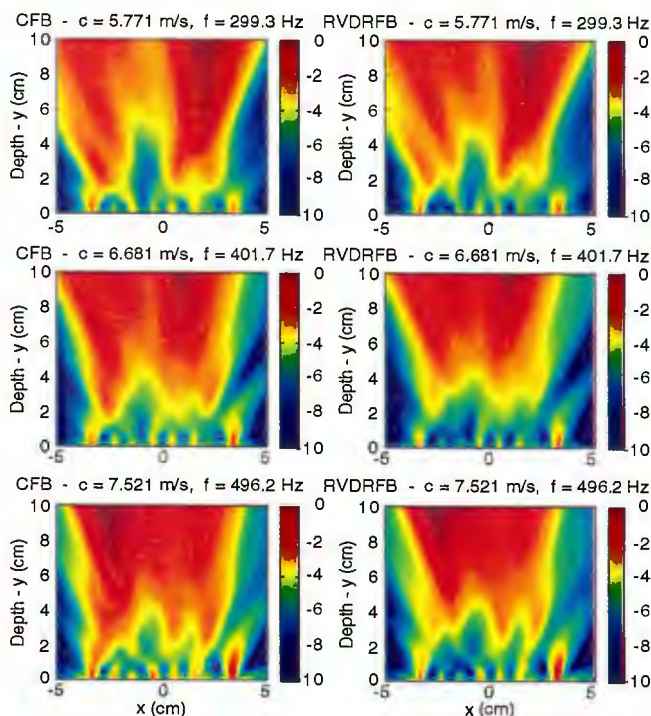


Figure B-90. Image of Data Set 915: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 916_16_1024.csd
 Runname: 916_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.981
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 1.514
 RVDR Surface Normalization (dB): 4.143
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 8.586

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.972
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 4.809
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.534
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.945
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

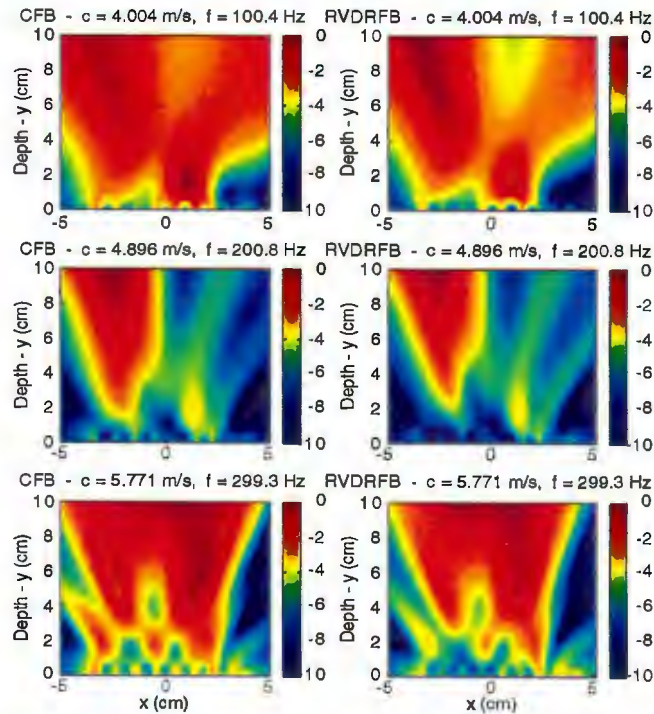


Figure B-91. Image of Data Set 916: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 916_16_1024.csd
 Runname: 916_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.534
 CFB Surface Maximum Location
 X (cm): 1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 1.945
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.876
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.138
 RVDR Surface Maximum Location
 X (cm): 0.102 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.482
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 8.788
 RVDR Surface Normalization (dB): 2.452
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

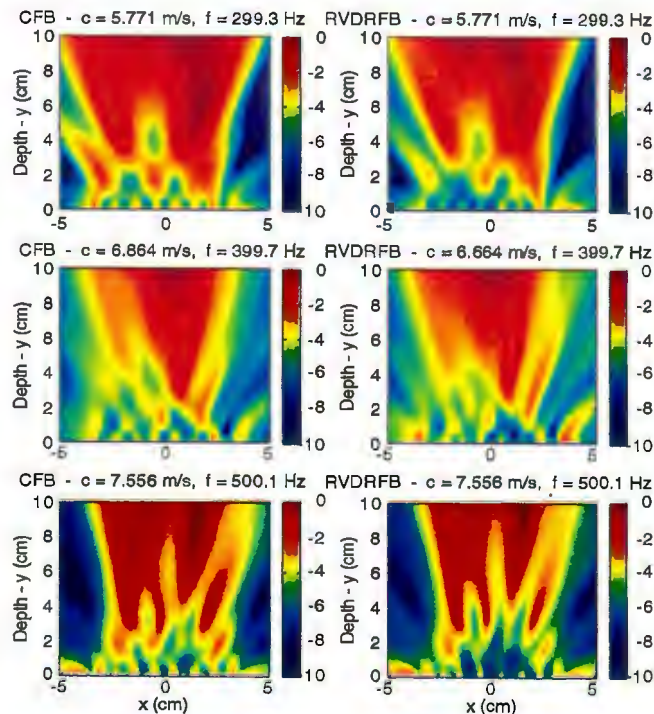


Figure B-92. Image of Data Set 916: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 916_32_512.csd
 Runname: 916_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.487
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 6.767
 RVDR Surface Normalization (dB): 4.185
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 6.767

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.51
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 4.949
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.993
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.937
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

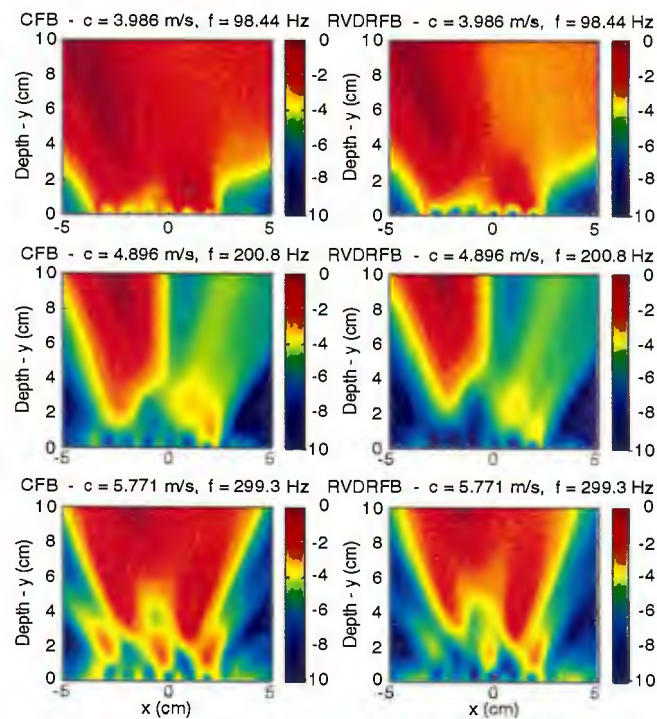


Figure B-93. Image of Data Set 916: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 916_32_512.csd
 Runname: 916_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.993
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.937
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.335
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.151
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.351
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 8.99
 RVDR Surface Normalization (dB): 2.009
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

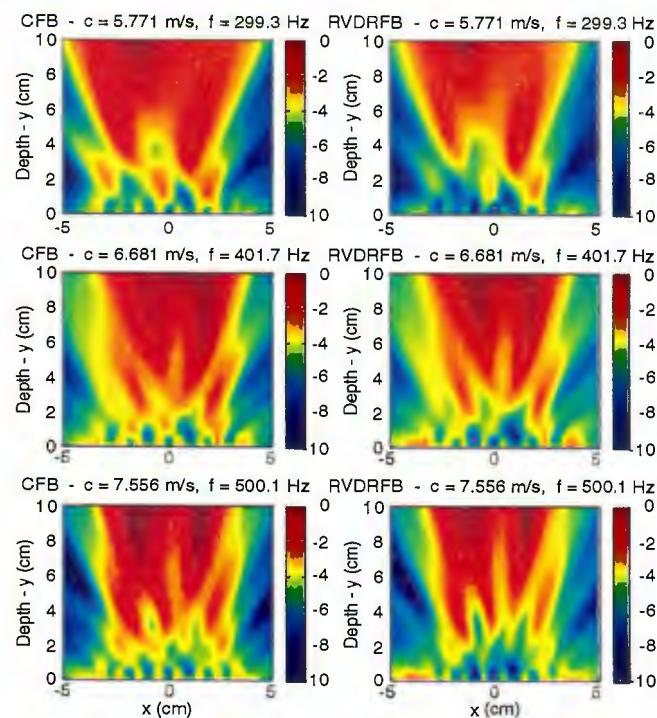


Figure B-94. Image of Data Set 916: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 916_64_256.csd
 Runname: 916_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.878
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.856
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 8.182
 RVDR Surface Normalization (dB): 4.45
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 8.384

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.286
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 4.804
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.895
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.975
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

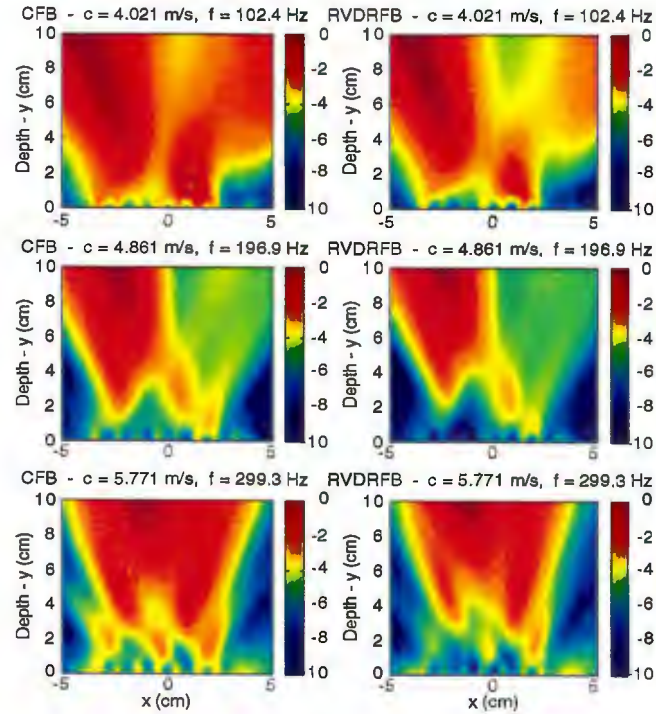


Figure B-95. Image of Data Set 916: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 916_64_256.csd
 Runname: 916_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.895
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.975
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.764
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.735
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.733
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 9.596
 RVDR Surface Normalization (dB): 2.511
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

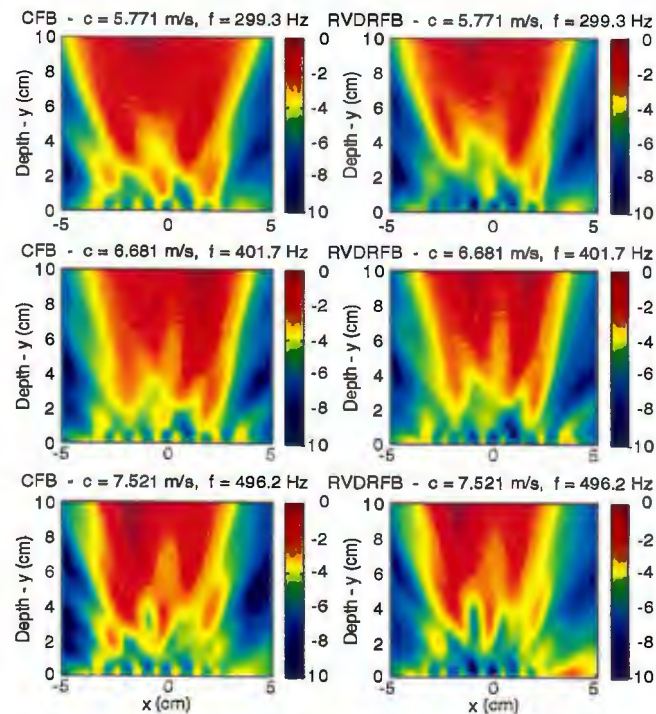


Figure B-96. Image of Data Set 916: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 917_16_1024.csd

Runname: 917_16_1024

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 4.879

CFB Surface Maximum Location

X (cm): 2.959 Y (cm): 3.131

RVDR Surface Normalization (dB): 4.101

RVDR Surface Maximum Location

X (cm): 3.367 Y (cm): 4.141

Frequency 200 Hz

CFB Surface Normalization (dB): 4.847

CFB Surface Maximum Location

X (cm): -3.163 Y (cm): 10

RVDR Surface Normalization (dB): 3.768

RVDR Surface Maximum Location

X (cm): -3.163 Y (cm): 10

Frequency 300 Hz

CFB Surface Normalization (dB): 3.265

CFB Surface Maximum Location

X (cm): -1.327 Y (cm): 10

RVDR Surface Normalization (dB): 2.631

RVDR Surface Maximum Location

X (cm): -1.327 Y (cm): 10

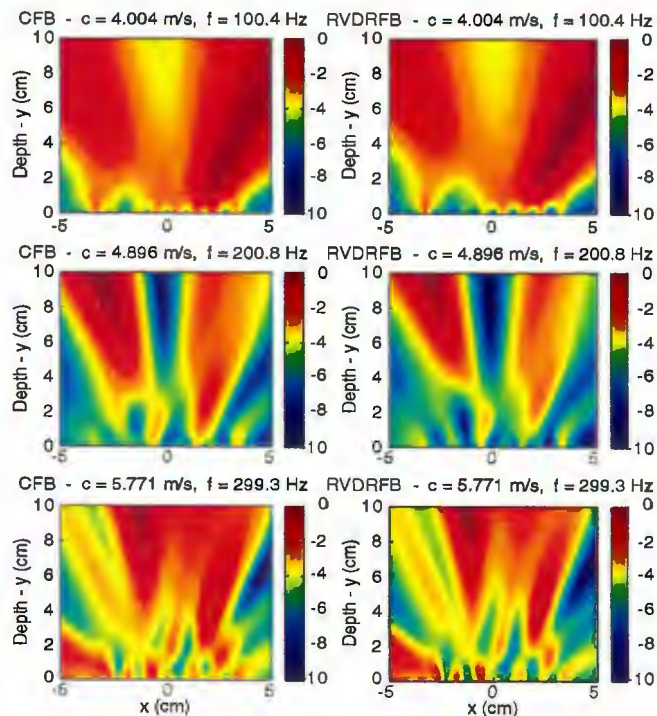


Figure B-97. Image of Data Set 917: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 917_16_1024.csd

Runname: 917_16_1024

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 3.265

CFB Surface Maximum Location

X (cm): -1.327 Y (cm): 10

RVDR Surface Normalization (dB): 2.631

RVDR Surface Maximum Location

X (cm): -1.327 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 3.3

CFB Surface Maximum Location

X (cm): -1.735 Y (cm): 10

RVDR Surface Normalization (dB): 2.041

RVDR Surface Maximum Location

X (cm): -1.735 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 3.283

CFB Surface Maximum Location

X (cm): -1.531 Y (cm): 10

RVDR Surface Normalization (dB): 1.476

RVDR Surface Maximum Location

X (cm): -1.327 Y (cm): 10

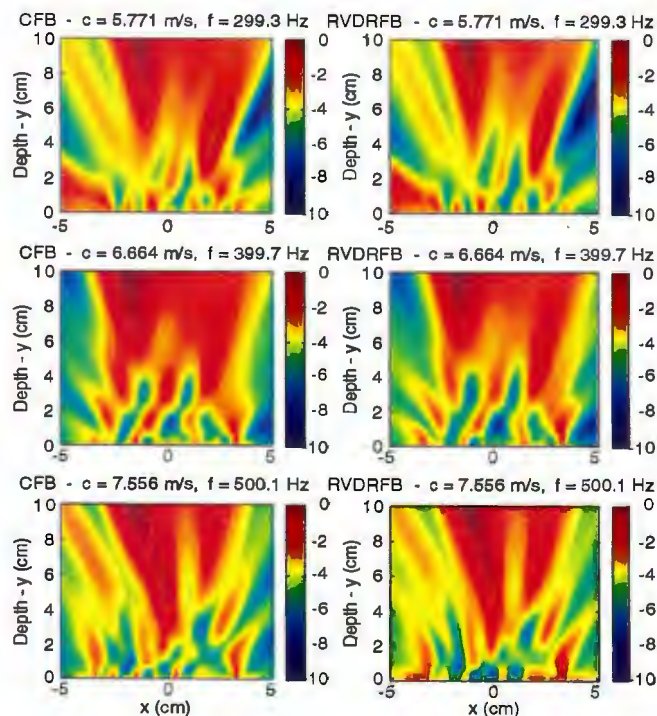


Figure B-98. Image of Data Set 917: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 917_32_512.csd
 Runname: 917_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.12
 CFB Surface Maximum Location
 X (cm): -4.592 Y (cm): 10
 RVDR Surface Normalization (dB): 4.433
 RVDR Surface Maximum Location
 X (cm): -4.796 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.743
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 2.958
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.122
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.527
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

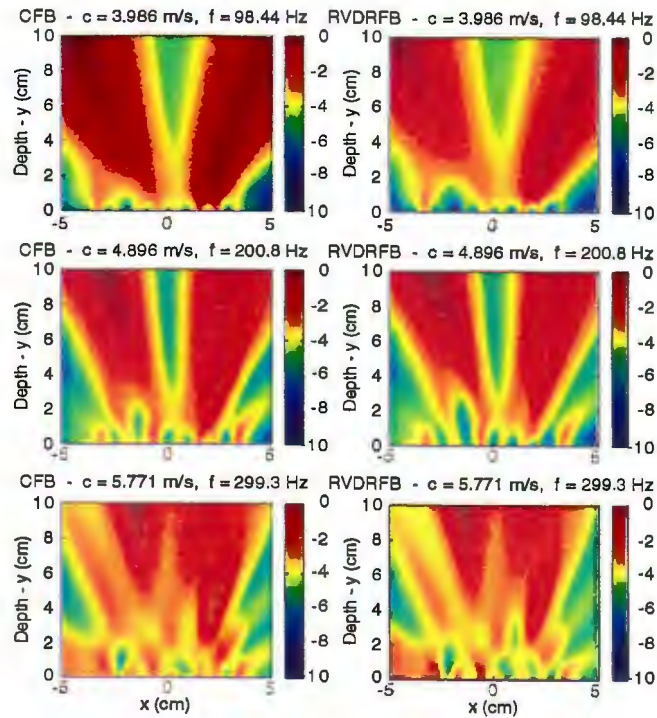


Figure B-99. Image of Data Set 917: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 917_32_512.csd
 Runname: 917_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.122
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.527
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.593
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.663
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.592
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.001
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

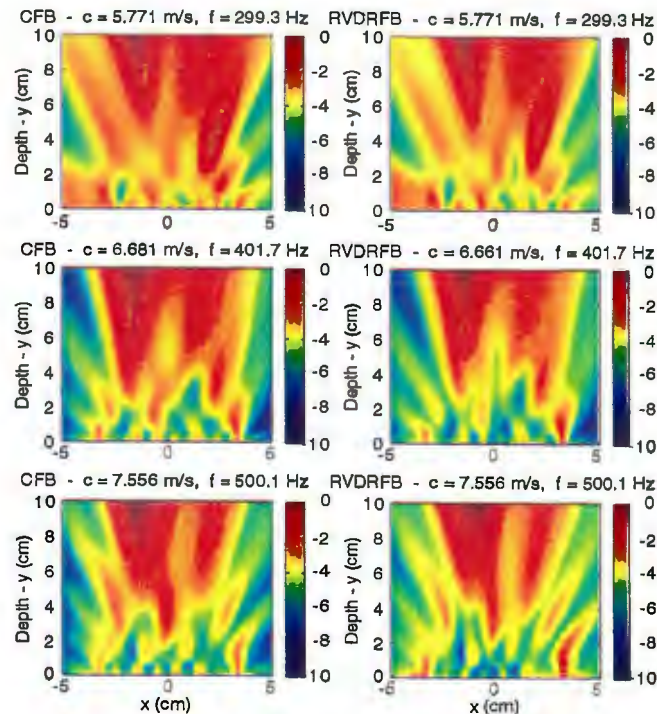


Figure B-100. Image of Data Set 917: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 917_64_256.csd
 Runname: 917_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.664
 CFB Surface Maximum Location
 X (cm): -4.796 Y (cm): 10
 RVDR Surface Normalization (dB): 4.122
 RVDR Surface Maximum Location
 X (cm): -4.796 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.494
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 3.982
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.68
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.194
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

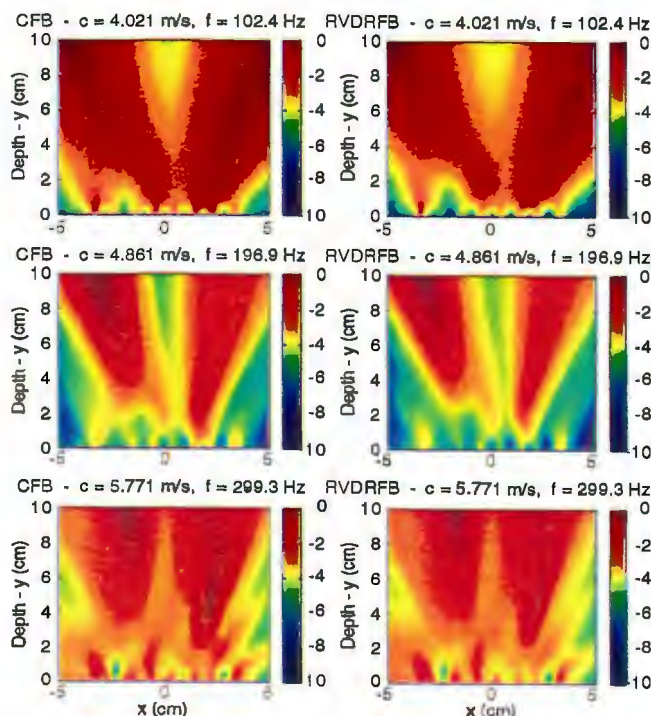


Figure B-101. Image of Data Set 917: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 917_64_256.csd
 Runname: 917_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.68
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.194
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.62
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.932
 RVDR Surface Maximum Location
 X (cm): -0.9184 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.374
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 3.26
 RVDR Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10

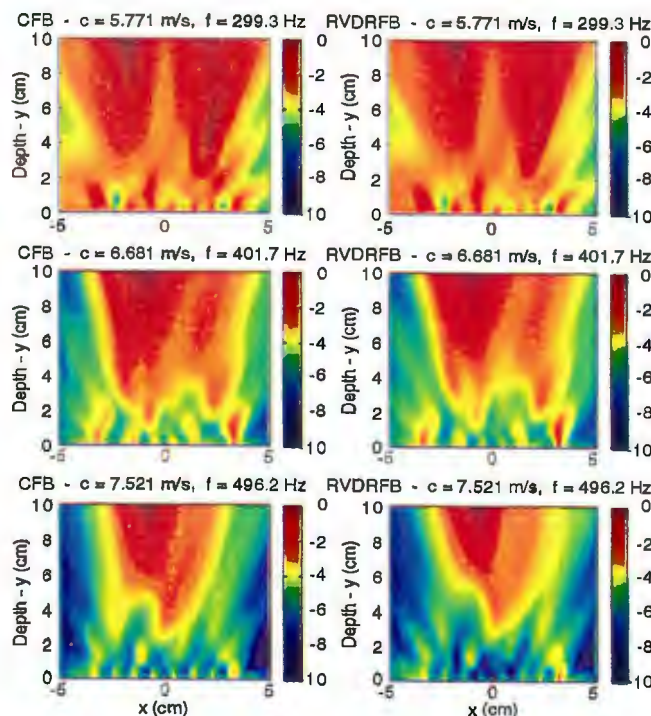


Figure B-102. Image of Data Set 917: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 918_18_1024.csd
 Runname: 918_18_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.138
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 10
 RVDR Surface Normalization (dB): 4.345
 RVDR Surface Maximum Location
 X (cm): -3.163 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.358
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 3.707
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.283
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.566
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

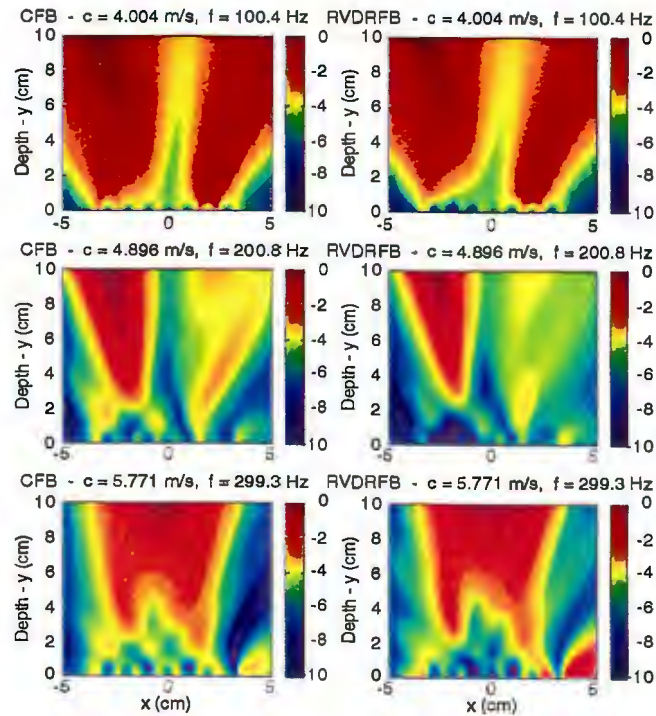


Figure B-103. Image of Data Set 918: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 918_18_1024.csd
 Runname: 918_18_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.283
 CFB Surface Maximum Location
 X (cm): -0.102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.566
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.919
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.59
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.312
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 0.6542
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 6.969

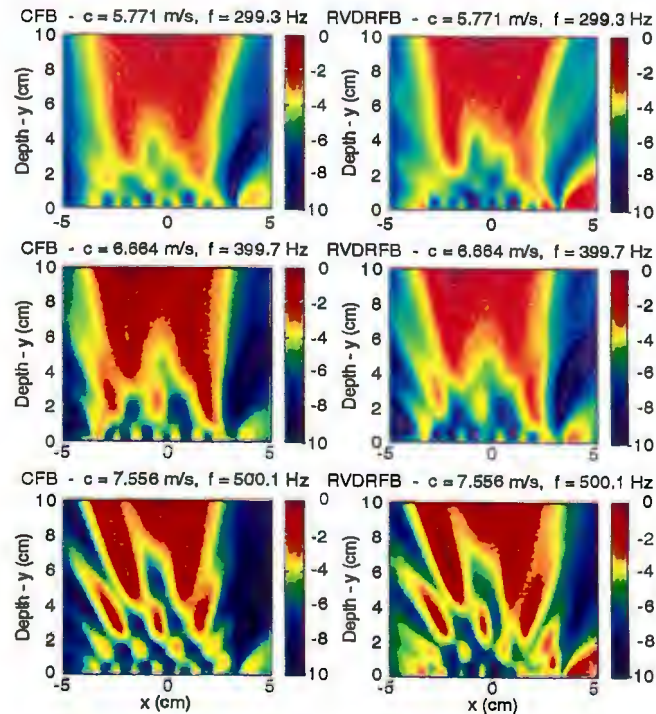


Figure B-104. Image of Data Set 918: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 918_32_512.csd
 Runname: 918_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.846
 CFB Surface Maximum Location
 X (cm): -4.592 Y (cm): 10
 RVDR Surface Normalization (dB): 3.74
 RVDR Surface Maximum Location
 X (cm): -4.796 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.916
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 3.64
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.173
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.889
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

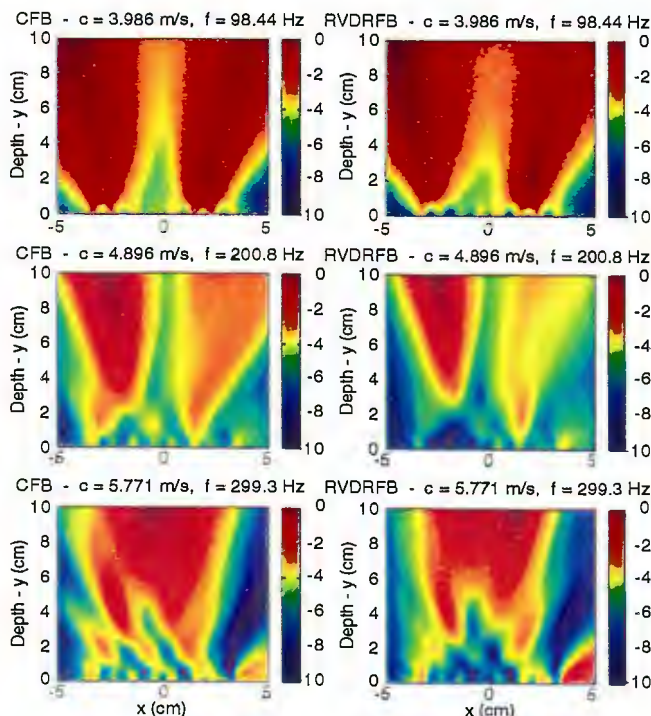


Figure B-105. Image of Data Set 918: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 918_32_512.csd
 Runname: 918_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.173
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 1.889
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 5.187
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 3.711
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.537
 CFB Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 1.562
 RVDR Surface Maximum Location
 X (cm): -0.5102 Y (cm): 10

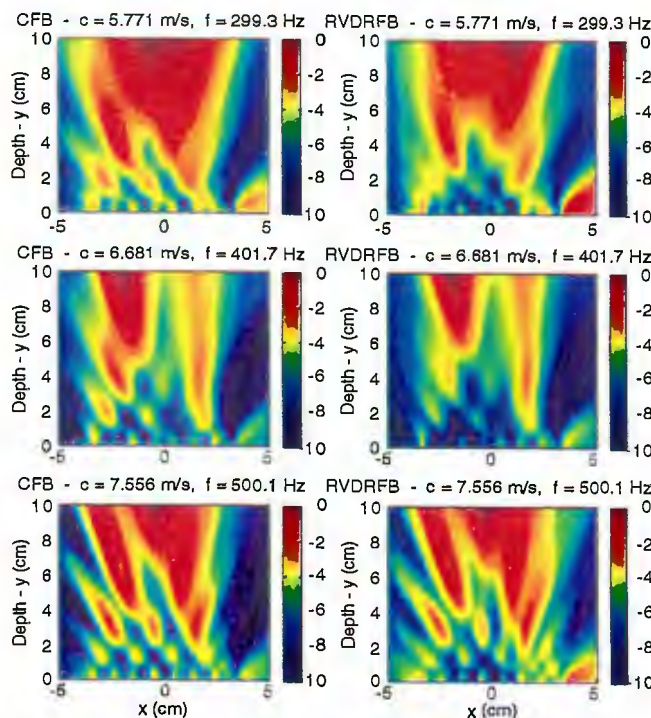


Figure B-106. Image of Data Set 918: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 918_64_256.csd
 Runname: 918_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.905
 CFB Surface Maximum Location
 X (cm): 4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 3.862
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 4.343

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.84
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 3.795
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.864
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.325
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

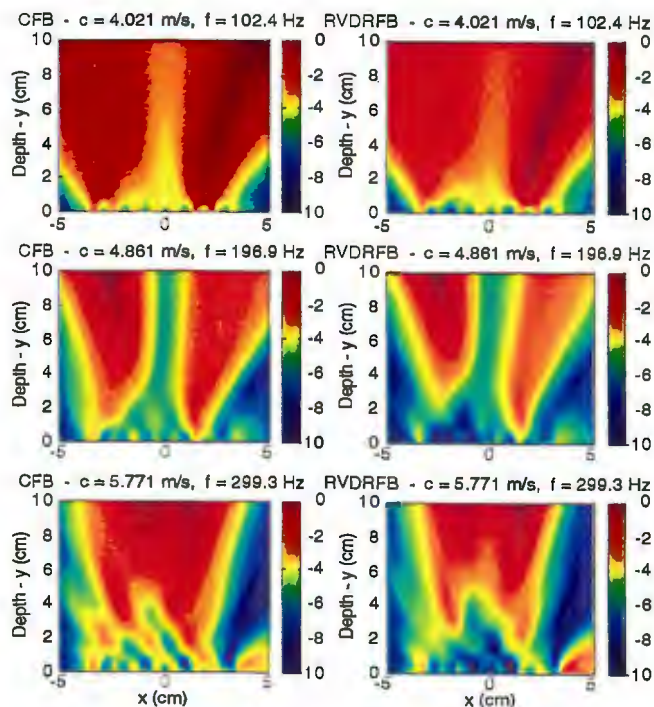


Figure B-107. Image of Data Set 918: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 918_64_256.csd
 Runname: 918_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.864
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.325
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.792
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 3.546
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.787
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 1.353
 RVDR Surface Maximum Location
 X (cm): -0.102 Y (cm): 10

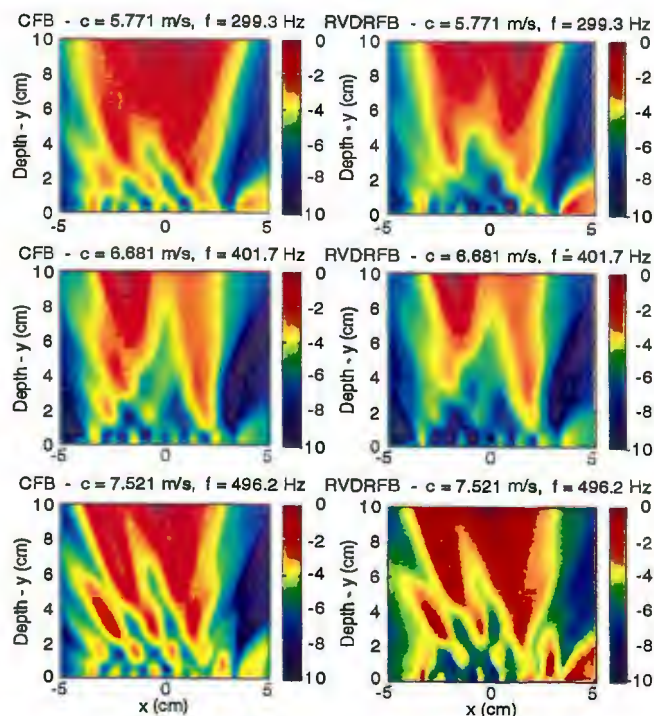


Figure B-108. Image of Data Set 918: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 919_16_1024.csd

Runname: 919_16_1024

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 7.056

CFB Surface Maximum Location

X (cm): -2.551 Y (cm): 6.161

RVDR Surface Normalization (dB): 5.631

RVDR Surface Maximum Location

X (cm): -2.551 Y (cm): 5.757

Frequency 200 Hz

CFB Surface Normalization (dB): 4.105

CFB Surface Maximum Location

X (cm): -2.959 Y (cm): 10

RVDR Surface Normalization (dB): 3.444

RVDR Surface Maximum Location

X (cm): -2.959 Y (cm): 10

Frequency 300 Hz

CFB Surface Normalization (dB): 3.925

CFB Surface Maximum Location

X (cm): 1.327 Y (cm): 10

RVDR Surface Normalization (dB): 2.38

RVDR Surface Maximum Location

X (cm): -2.755 Y (cm): 10

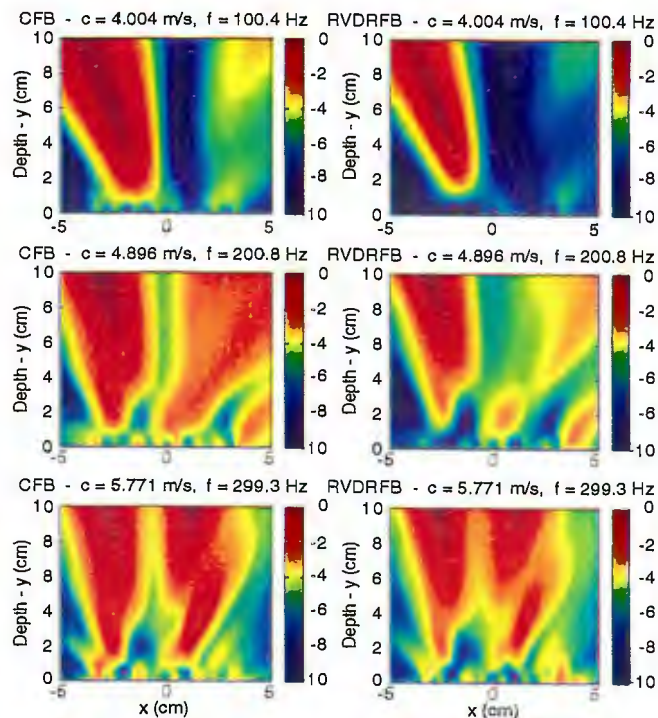


Figure B-109. Image of Data Set 919: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 919_16_1024.csd

Runname: 919_16_1024

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 16

Number of Points per FFT: 1024

Frequency Bin Resolution (Hz): 1.969

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 3.925

CFB Surface Maximum Location

X (cm): 1.327 Y (cm): 10

RVDR Surface Normalization (dB): 2.38

RVDR Surface Maximum Location

X (cm): -2.755 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 4.101

CFB Surface Maximum Location

X (cm): 0.5102 Y (cm): 10

RVDR Surface Normalization (dB): 1.092

RVDR Surface Maximum Location

X (cm): 0.3061 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 5.257

CFB Surface Maximum Location

X (cm): -1.122 Y (cm): 10

RVDR Surface Normalization (dB): 3.439

RVDR Surface Maximum Location

X (cm): -0.9184 Y (cm): 10

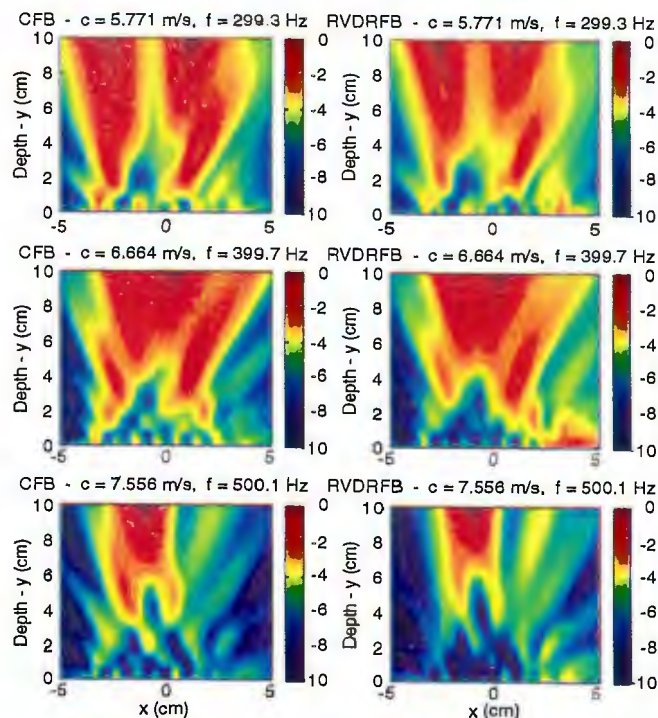


Figure B-110. Image of Data Set 919: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 919_32_512.csd

Runname: 919_32_512

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 32

Number of Points per FFT: 512

Frequency Bin Resolution (Hz): 3.938

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 6.838

CFB Surface Maximum Location

X (cm): -2.143 Y (cm): 5.555

RVDR Surface Normalization (dB): 5.181

RVDR Surface Maximum Location

X (cm): -2.347 Y (cm): 5.757

Frequency 200 Hz

CFB Surface Normalization (dB): 3.951

CFB Surface Maximum Location

X (cm): -3.367 Y (cm): 10

RVDR Surface Normalization (dB): 3.31

RVDR Surface Maximum Location

X (cm): -3.163 Y (cm): 10

Frequency 300 Hz

CFB Surface Normalization (dB): 4.063

CFB Surface Maximum Location

X (cm): 1.327 Y (cm): 10

RVDR Surface Normalization (dB): 2.528

RVDR Surface Maximum Location

X (cm): 1.122 Y (cm): 10

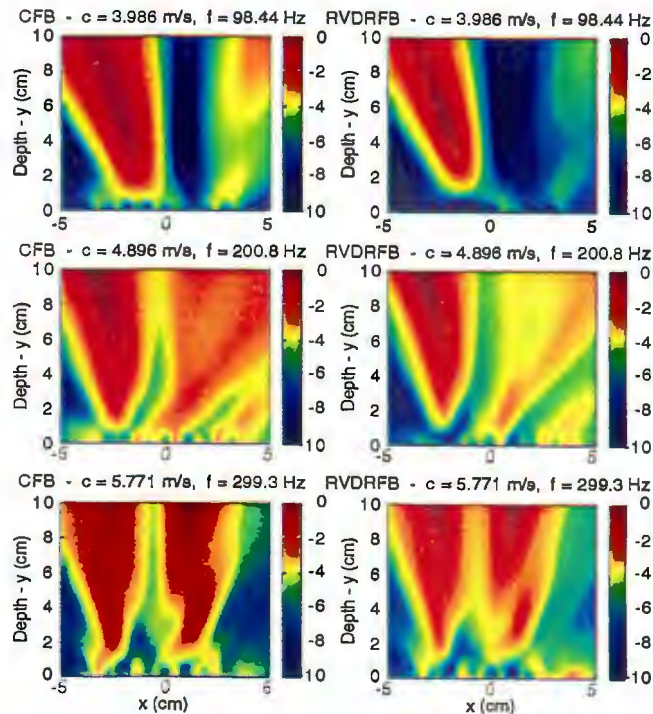


Figure B-111. Image of 919: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 919_32_512.csd

Runname: 919_32_512

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 32

Number of Points per FFT: 512

Frequency Bin Resolution (Hz): 3.938

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 4.063

CFB Surface Maximum Location

X (cm): 1.327 Y (cm): 10

RVDR Surface Normalization (dB): 2.528

RVDR Surface Maximum Location

X (cm): 1.122 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 4.13

CFB Surface Maximum Location

X (cm): 0.9184 Y (cm): 10

RVDR Surface Normalization (dB): 1.969

RVDR Surface Maximum Location

X (cm): -2.347 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 5.094

CFB Surface Maximum Location

X (cm): -1.122 Y (cm): 10

RVDR Surface Normalization (dB): 3.713

RVDR Surface Maximum Location

X (cm): -1.122 Y (cm): 10

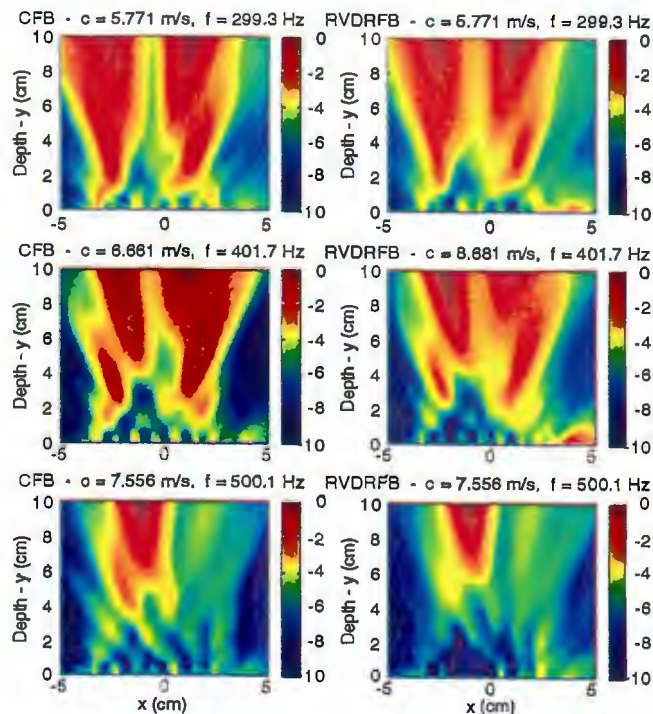


Figure B-112. Image of Data Set 919: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 919_64_256.csd
 Runname: 919_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.951
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.353
 RVDR Surface Normalization (dB): 5.983
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.353

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.17
 CFB Surface Maximum Location
 X (cm): -2.959 Y (cm): 10
 RVDR Surface Normalization (dB): 3.658
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.131
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.923
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

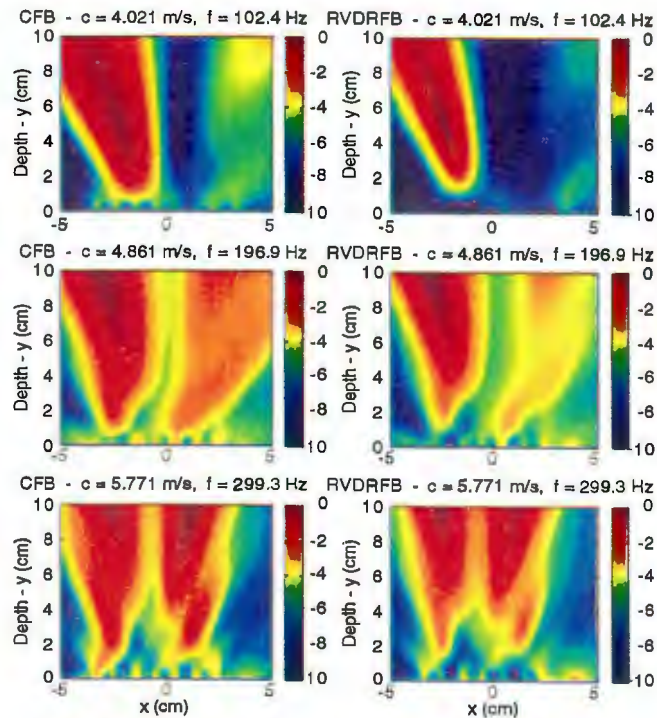


Figure B-113. Image of Data Set 919: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 919_64_256.csd
 Runname: 919_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.131
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.923
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.129
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.377
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.861
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 3.585
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

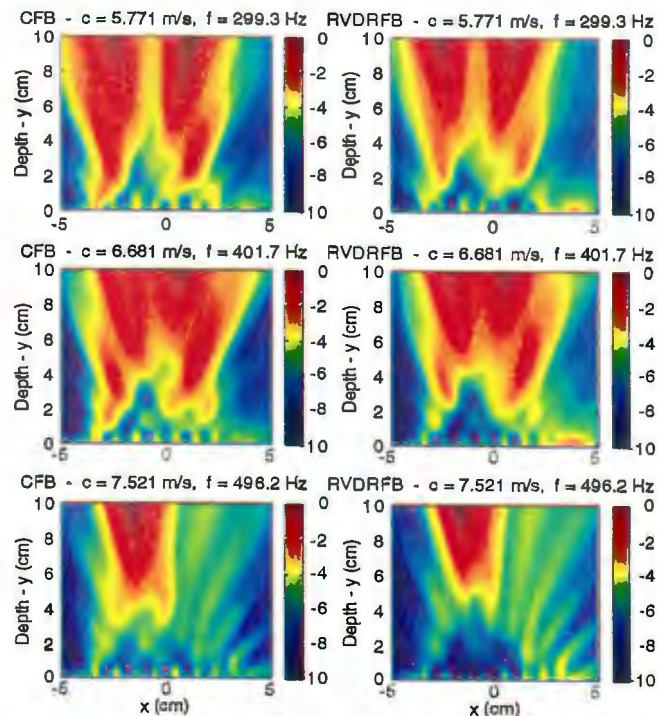


Figure B-114. Image of Data Set 919: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 920_16_1024.csd
 Runname: 920_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.938
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.757
 RVDR Surface Normalization (dB): 6.313
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.555

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.116
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 2.688
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.198
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 9.192
 RVDR Surface Normalization (dB): 2.072
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

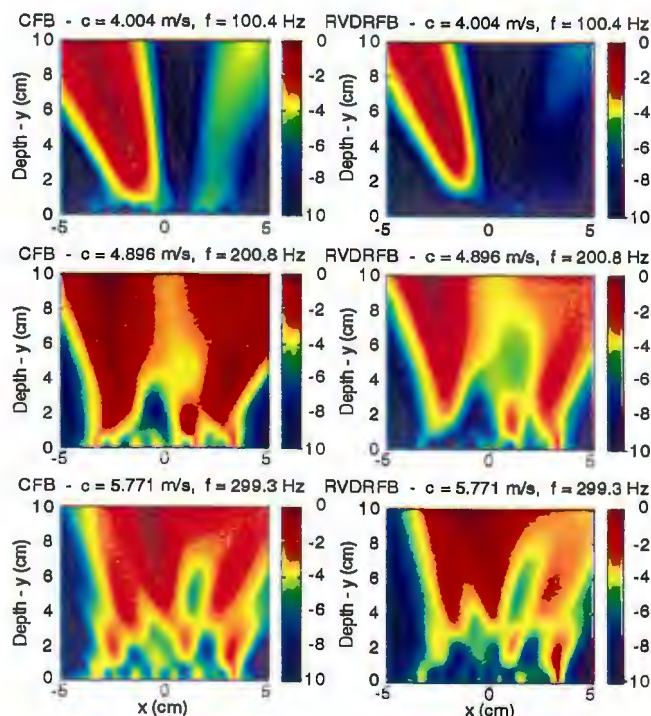


Figure B-115. Image of Data Set 920: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 920_16_1024.csd
 Runname: 920_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.198
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 9.192
 RVDR Surface Normalization (dB): 2.072
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.294
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 3.253
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.005
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.412
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

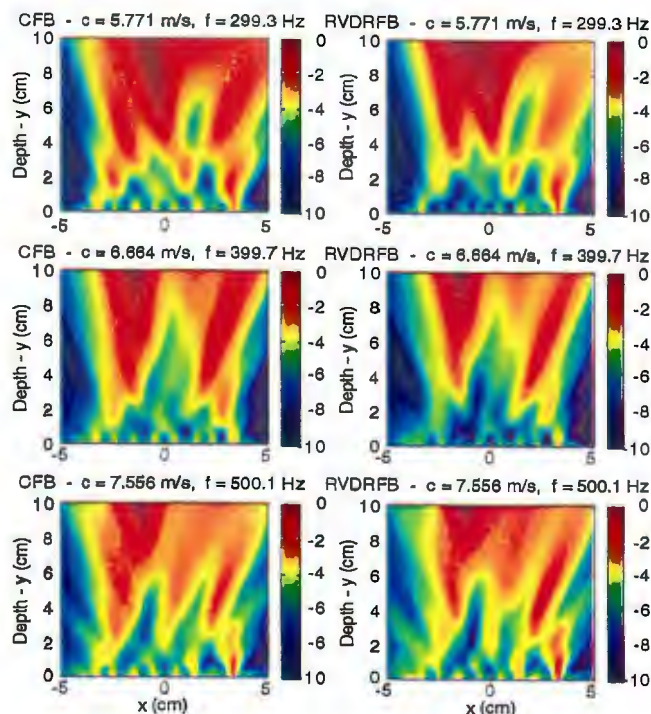


Figure B-116. Image of Data Set 920: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 920_32_512.csd
 Runname: 920_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.885
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.757
 RVDR Surface Normalization (dB): 6.599
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.555

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.258
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 3.815
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.596
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 9.192
 RVDR Surface Normalization (dB): 2.117
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

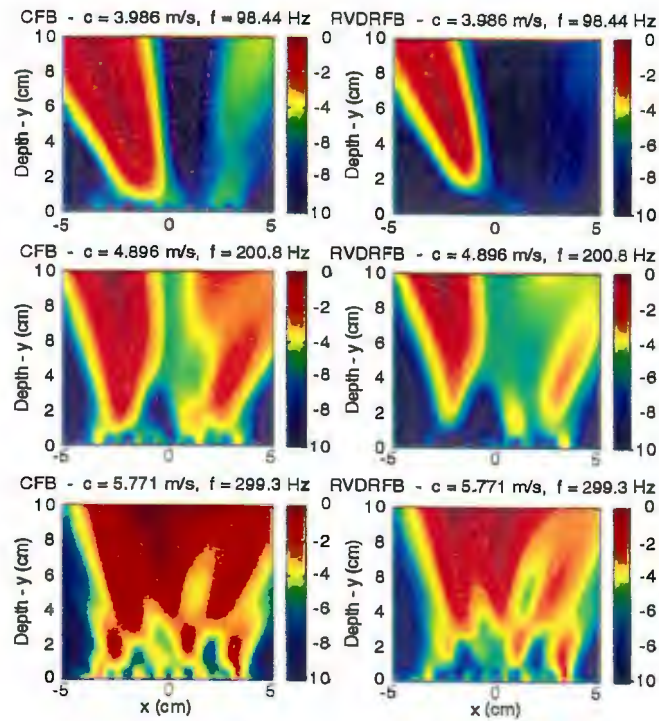


Figure B-117. Image of Data Set 920: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 920_32_512.csd
 Runname: 920_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.596
 CFB Surface Maximum Location
 X (cm): -0.7143 Y (cm): 9.192
 RVDR Surface Normalization (dB): 2.117
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.745
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 3.295
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.051
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.512
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

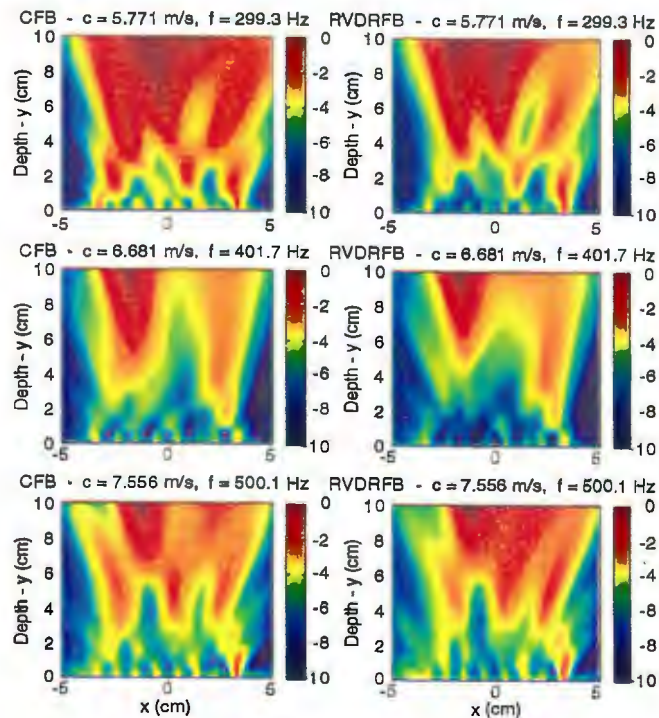


Figure B-118. Image of Data Set 920: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 920_64_256.csd
 Runname: 920_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.385
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.757
 RVDR Surface Normalization (dB): 6.168
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.555

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.48
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 3.009
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.972
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.808
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

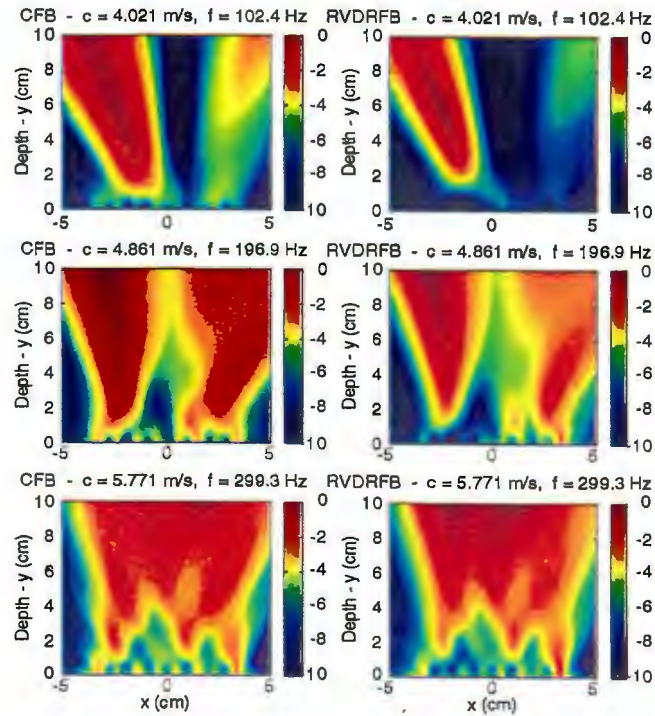


Figure B-119. Image of Data Set 920: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 920_64_256.csd
 Runname: 920_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.972
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 1.808
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.324
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 3.17
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.236
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 3.013
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

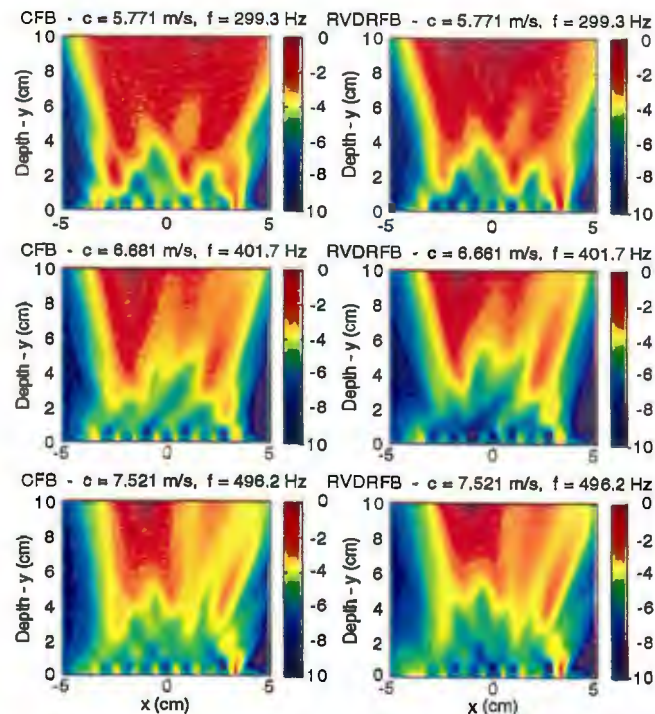


Figure B-120. Image of Data Set 920: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 921_16_1024.csd
 Runname: 921_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.716
 CFB Surface Maximum Location
 X (cm): -3.367 Y (cm): 7.778
 RVDR Surface Normalization (dB): 7.259
 RVDR Surface Maximum Location
 X (cm): -3.367 Y (cm): 7.576

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.813
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 9.394
 RVDR Surface Normalization (dB): 3.6
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 8.969

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.845
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 4.545
 RVDR Surface Normalization (dB): 2.484
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

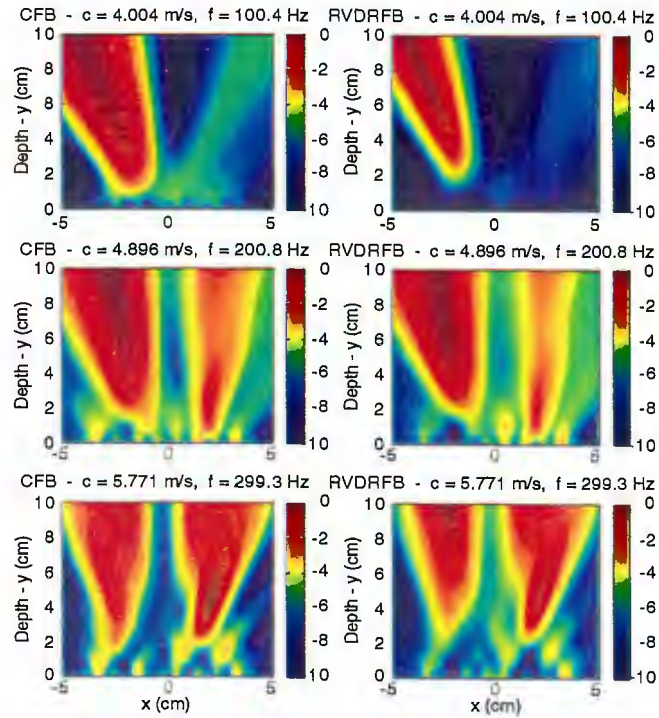


Figure B-121. Image of Data Set 921: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (bottom)

Filename: 921_16_1024.csd
 Runname: 921_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.845
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 4.545
 RVDR Surface Normalization (dB): 2.484
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.982
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.401
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.391
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 1.693
 RVDR Surface Maximum Location
 X (cm): 2.551 Y (cm): 7.171

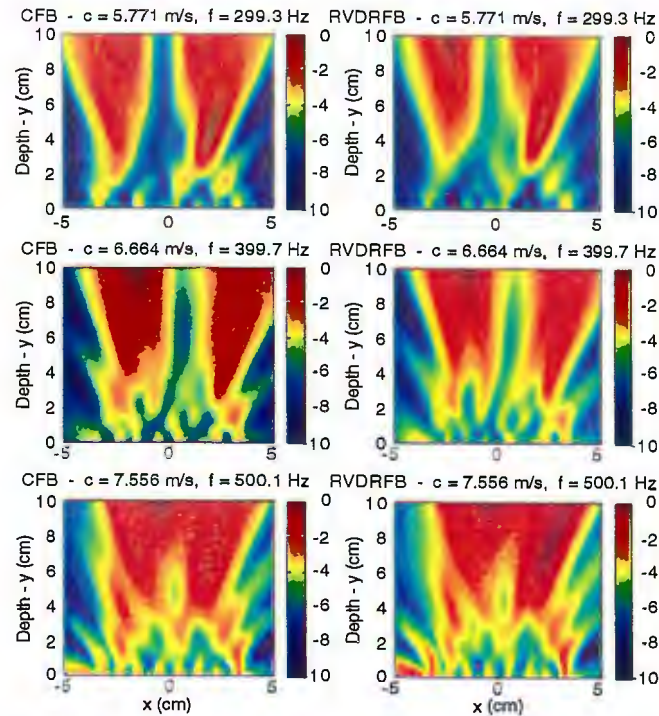


Figure B-122. Image of Data Set 921: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 921_32_512.csd

Runname: 921_32_512

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 32

Number of Points per FFT: 512

Frequency Bin Resolution (Hz): 3.938

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 8.411

CFB Surface Maximum Location

X (cm): -2.551 Y (cm): 5.959

RVDR Surface Normalization (dB): 5.834

RVDR Surface Maximum Location

X (cm): -2.755 Y (cm): 6.161

Frequency 200 Hz

CFB Surface Normalization (dB): 4.977

CFB Surface Maximum Location

X (cm): -2.347 Y (cm): 8.788

RVDR Surface Normalization (dB): 4.168

RVDR Surface Maximum Location

X (cm): -2.347 Y (cm): 8.586

Frequency 300 Hz

CFB Surface Normalization (dB): 4.611

CFB Surface Maximum Location

X (cm): 1.735 Y (cm): 10

RVDR Surface Normalization (dB): 2.661

RVDR Surface Maximum Location

X (cm): -2.143 Y (cm): 10

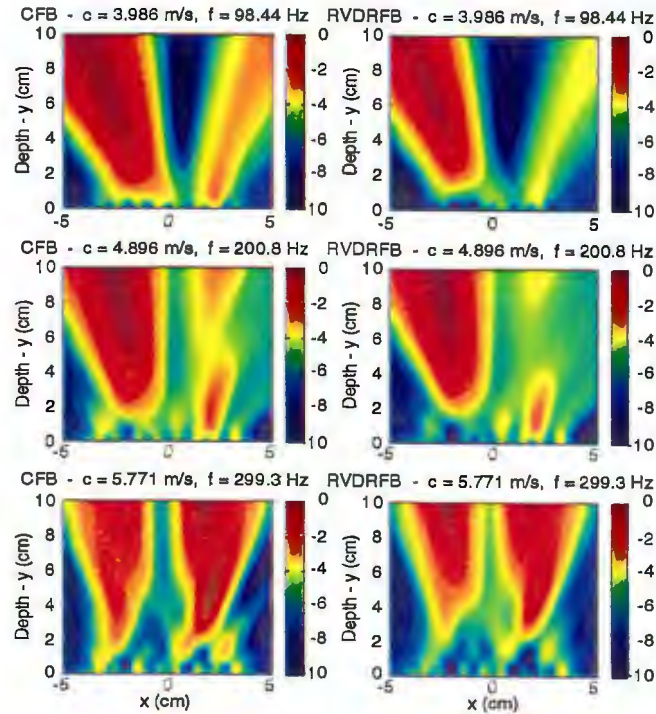


Figure B-123. Image of Data Set 921: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 921_32_512.csd

Runname: 921_32_512

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 32

Number of Points per FFT: 512

Frequency Bin Resolution (Hz): 3.938

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 4.611

CFB Surface Maximum Location

X (cm): 1.735 Y (cm): 10

RVDR Surface Normalization (dB): 2.661

RVDR Surface Maximum Location

X (cm): -2.143 Y (cm): 10

Frequency 400 Hz

CFB Surface Normalization (dB): 3.839

CFB Surface Maximum Location

X (cm): -1.735 Y (cm): 10

RVDR Surface Normalization (dB): 2.927

RVDR Surface Maximum Location

X (cm): -1.939 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 3.674

CFB Surface Maximum Location

X (cm): -0.9184 Y (cm): 10

RVDR Surface Normalization (dB): 2.347

RVDR Surface Maximum Location

X (cm): -0.9184 Y (cm): 10

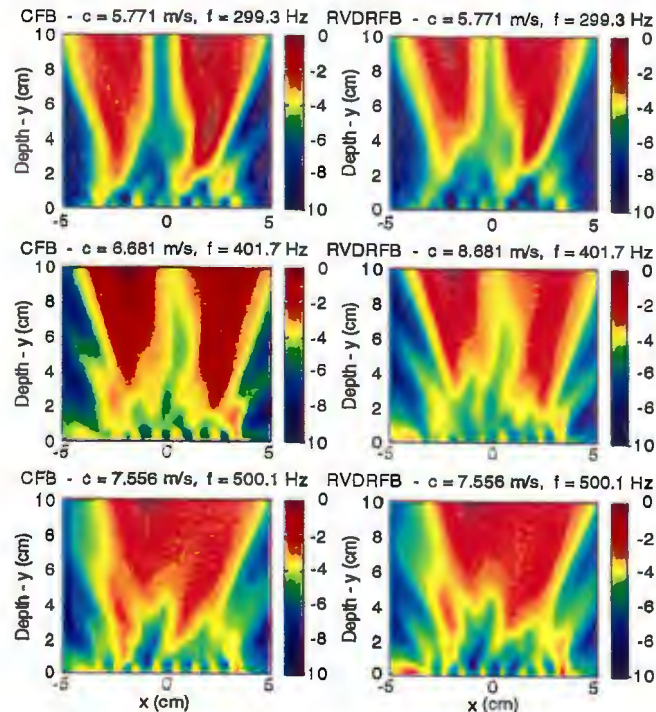


Figure B-124. Image of Data Set 921: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 921_64_256.csd
 Runname: 921_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.769
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 6.565
 RVDR Surface Normalization (dB): 6.237
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 6.363

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.116
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 9.596
 RVDR Surface Normalization (dB): 4.605
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 9.192

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.646
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.427
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

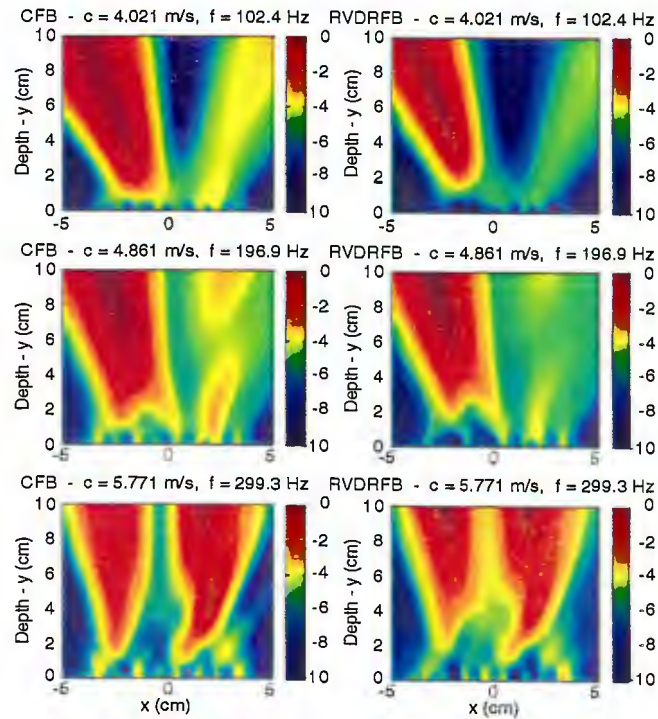


Figure B-125. Image of Data Set 921: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 921_64_256.csd
 Runname: 921_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.646
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.427
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.506
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.784
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.216
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.381
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

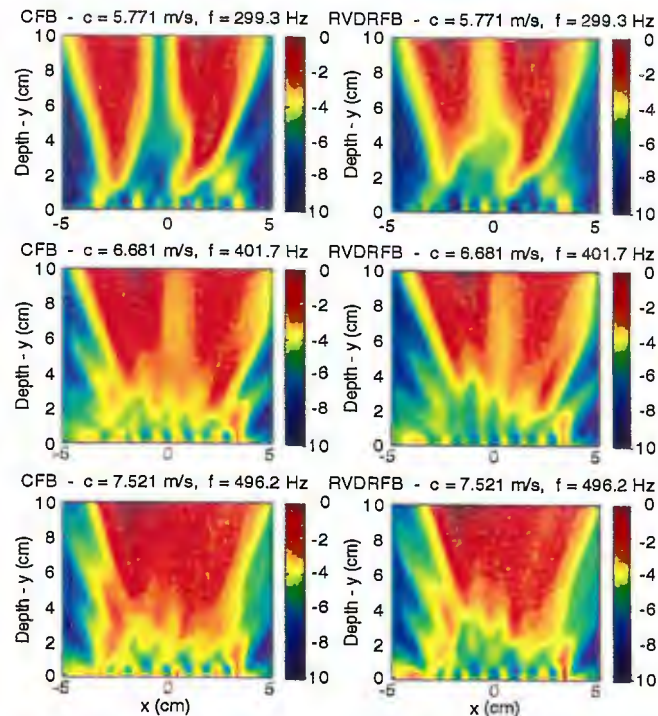


Figure B-126. Image of Data Set 921: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 922_16_1024.csd
 Runname: 922_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.098
 CFB Surface Maximum Location
 X (cm): -3.163 Y (cm): 6.969
 RVDR Surface Normalization (dB): 5.34
 RVDR Surface Maximum Location
 X (cm): -3.571 Y (cm): 7.576

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.533
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 3.879
 RVDR Surface Maximum Location
 X (cm): -2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.184
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 3.939
 RVDR Surface Normalization (dB): 1.672
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 3.535

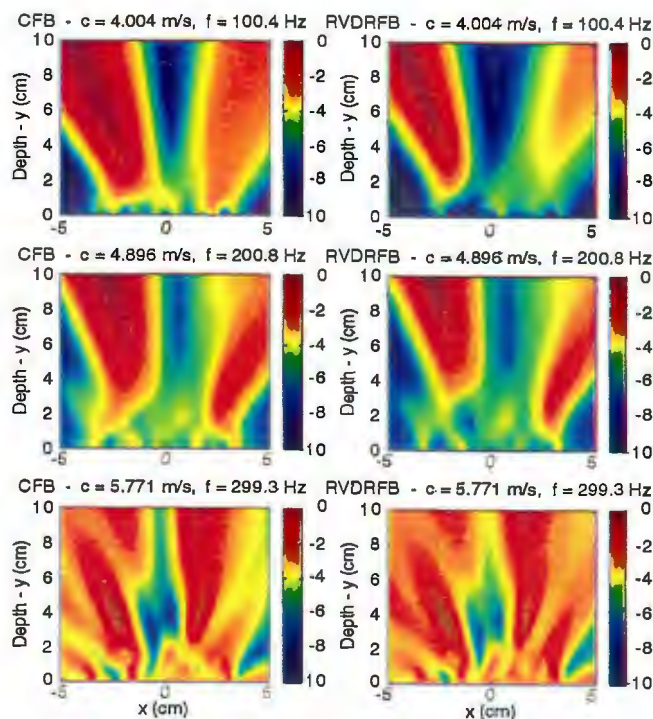


Figure B-127. Image of Data Set 922: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 500 Hz (Bottom)

Filename: 922_16_1024.csd
 Runname: 922_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.184
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 3.939
 RVDR Surface Normalization (dB): 1.672
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 3.535

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.138
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 5.757
 RVDR Surface Normalization (dB): 2.51
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 6.161

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.251
 CFB Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10
 RVDR Surface Normalization (dB): 2.145
 RVDR Surface Maximum Location
 X (cm): 0.5102 Y (cm): 10

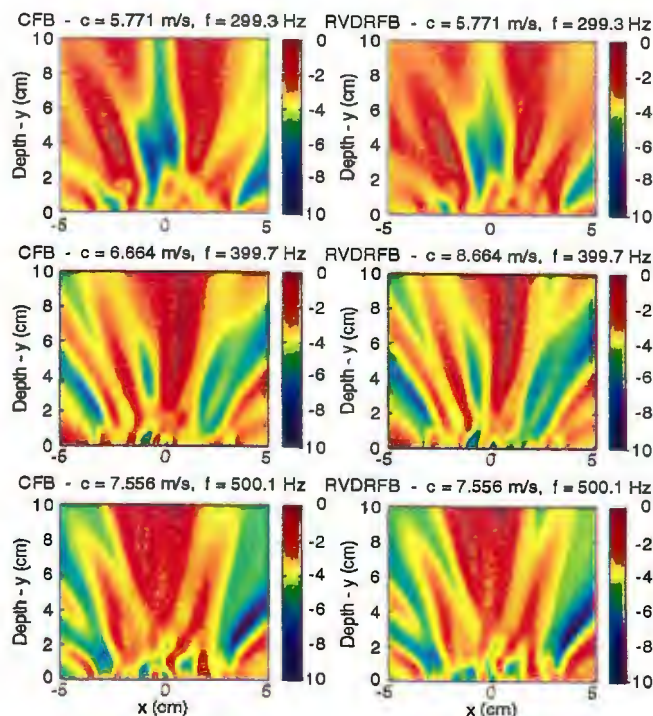


Figure B-128. Image of Data Set 922: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 922_32_512.csd
 Runname: 922_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.752
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 5.353
 RVDR Surface Normalization (dB): 4.337
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 6.161

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.511
 CFB Surface Maximum Location
 X (cm): -2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 4.009
 RVDR Surface Maximum Location
 X (cm): -2.959 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.36
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9869
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

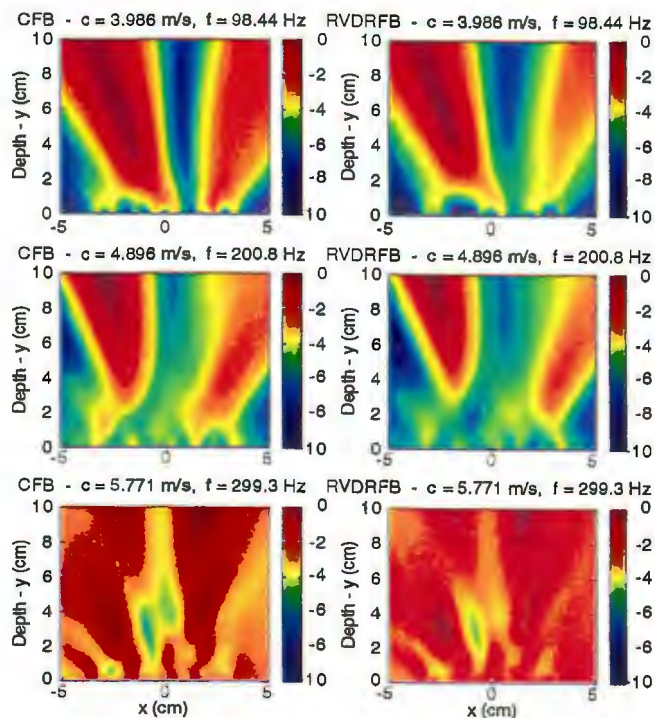


Figure B-129. Image of Data Set 922: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 922_32_512.csd
 Runname: 922_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 2.36
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 0.9869
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 2.579
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.018
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.21
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.77
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

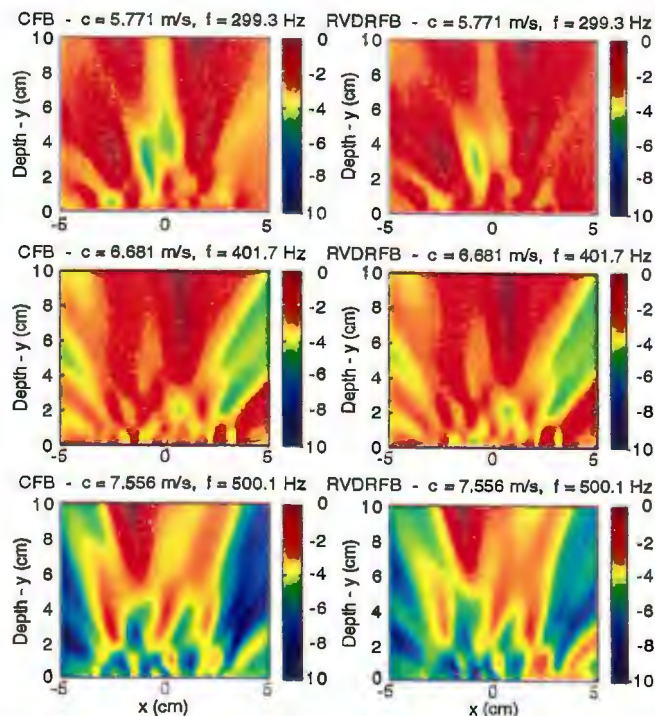


Figure B-130. Image of Data Set 922: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 922_64_256.csd

Runname: 922_64_256

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 64

Number of Points per FFT: 256

Frequency Bin Resolution (Hz): 7.876

RVDR Enhancement (linear): 6

Frequency 100 Hz

CFB Surface Normalization (dB): 5.557

CFB Surface Maximum Location

X (cm): -2.755 Y (cm): 6.767

RVDR Surface Normalization (dB): 4.705

RVDR Surface Maximum Location

X (cm): -3.163 Y (cm): 7.576

Frequency 200 Hz

CFB Surface Normalization (dB): 2.939

CFB Surface Maximum Location

X (cm): -2.755 Y (cm): 10

RVDR Surface Normalization (dB): 2.132

RVDR Surface Maximum Location

X (cm): -2.959 Y (cm): 10

Frequency 300 Hz

CFB Surface Normalization (dB): 2.452

CFB Surface Maximum Location

X (cm): -2.551 Y (cm): 2.727

RVDR Surface Normalization (dB): 1.214

RVDR Surface Maximum Location

X (cm): -2.551 Y (cm): 2.524

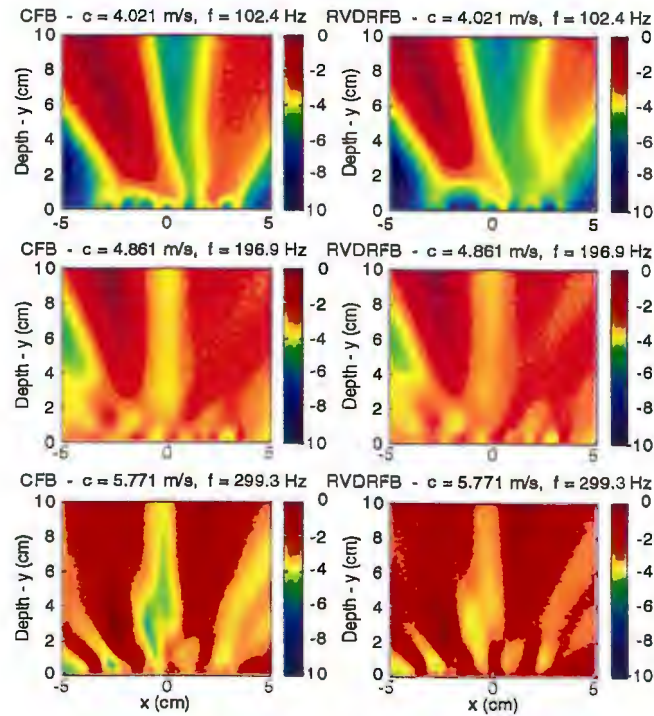


Figure B-131. Image of Data Set 922: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 922_64_256.csd

Runname: 922_64_256

Diastolic Phase

Spreading Parameter = 1

9 Channels Processed

Z Value of Cut (cm): 0

Wave Speed Interpolation

4 m/s at 100 Hz

12 m/s at 1000 Hz

Number of Temporal FFTs: 64

Number of Points per FFT: 256

Frequency Bin Resolution (Hz): 7.878

RVDR Enhancement (linear): 6

Frequency 300 Hz

CFB Surface Normalization (dB): 2.452

CFB Surface Maximum Location

X (cm): -2.551 Y (cm): 2.727

RVDR Surface Normalization (dB): 1.214

RVDR Surface Maximum Location

X (cm): -2.551 Y (cm): 2.524

Frequency 400 Hz

CFB Surface Normalization (dB): 2.216

CFB Surface Maximum Location

X (cm): 0.7143 Y (cm): 10

RVDR Surface Normalization (dB): 1.603

RVDR Surface Maximum Location

X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz

CFB Surface Normalization (dB): 3.22

CFB Surface Maximum Location

X (cm): -0.9184 Y (cm): 10

RVDR Surface Normalization (dB): 1.816

RVDR Surface Maximum Location

X (cm): -0.9184 Y (cm): 10

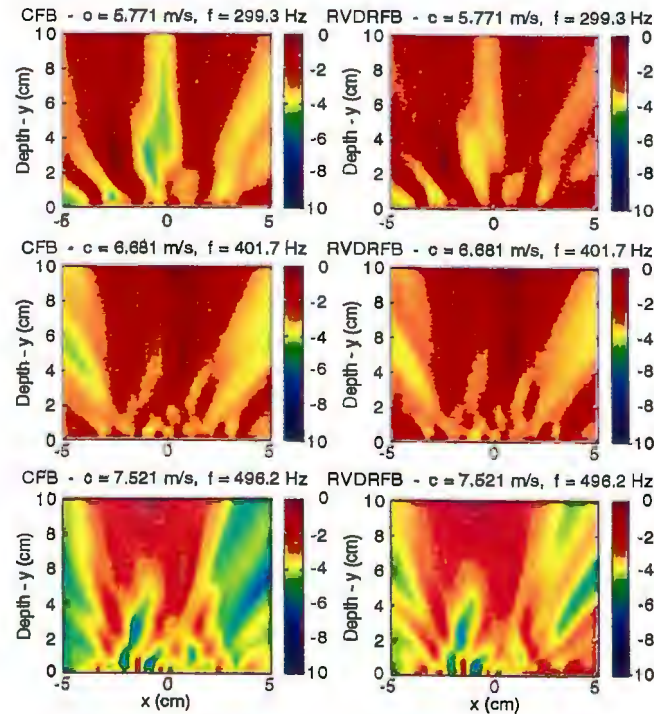


Figure B-132. Image of Data Set 922: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 923_16_1024.csd
 Runname: 923_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 7.304
 CFB Surface Maximum Location
 X (cm): 3.98 Y (cm): 8.99
 RVDR Surface Normalization (dB): 6.193
 RVDR Surface Maximum Location
 X (cm): 4.184 Y (cm): 9.394

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.93
 CFB Surface Maximum Location
 X (cm): 3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 2.65
 RVDR Surface Maximum Location
 X (cm): 4.796 Y (cm): 9.798

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.768
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.755
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

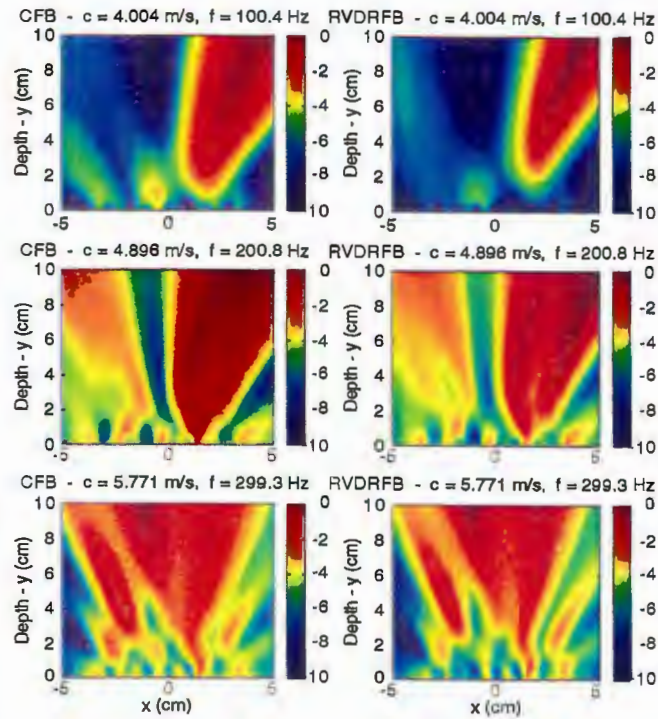


Figure B-133. Image of Data Set 923: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 923_16_1024.csd
 Runname: 923_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.768
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.755
 RVDR Surface Maximum Location
 X (cm): -1.122 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.86
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.767
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.132
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.037
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

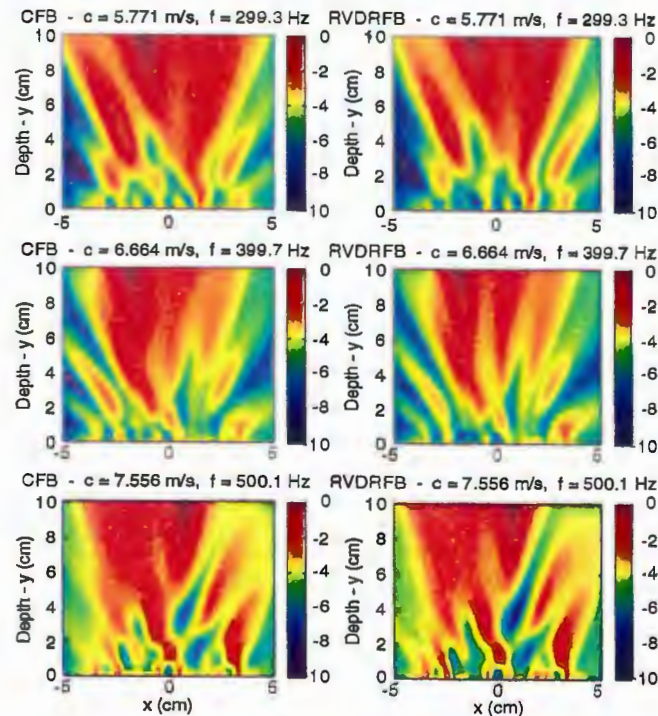


Figure B-134. Image of Data Set 923: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 923_32_512.csd
 Runname: 923_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.888
 CFB Surface Maximum Location
 X (cm): 4.184 Y (cm): 9.798
 RVDR Surface Normalization (dB): 6.036
 RVDR Surface Maximum Location
 X (cm): 4.184 Y (cm): 9.798

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.465
 CFB Surface Maximum Location
 X (cm): 3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 2.415
 RVDR Surface Maximum Location
 X (cm): 4.388 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.387
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.827
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

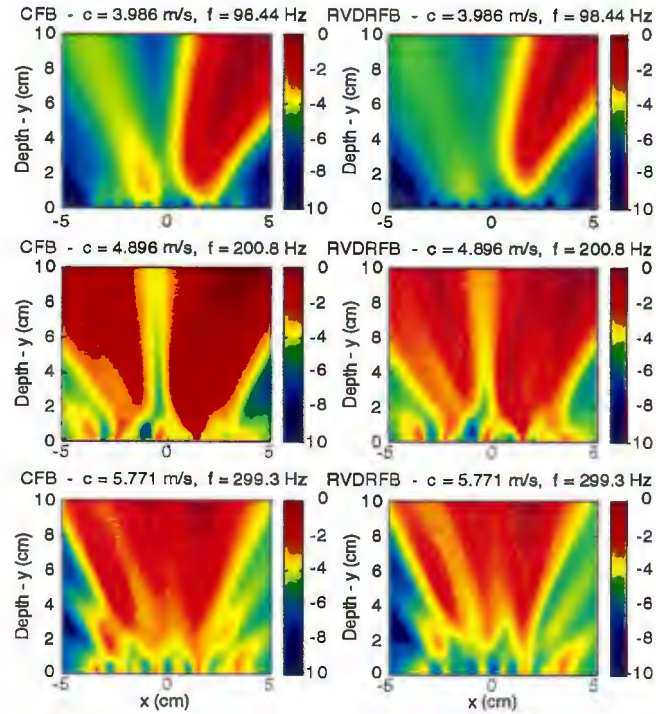


Figure B-135. Image of Data Set 923: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 923_32_512.csd
 Runname: 923_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.387
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.827
 RVDR Surface Maximum Location
 X (cm): 1.735 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.452
 CFB Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10
 RVDR Surface Normalization (dB): 2.286
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 8.588

Frequency 500 Hz
 CFB Surface Normalization (dB): 2.754
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 2.014
 RVDR Surface Maximum Location
 X (cm): 1.122 Y (cm): 10

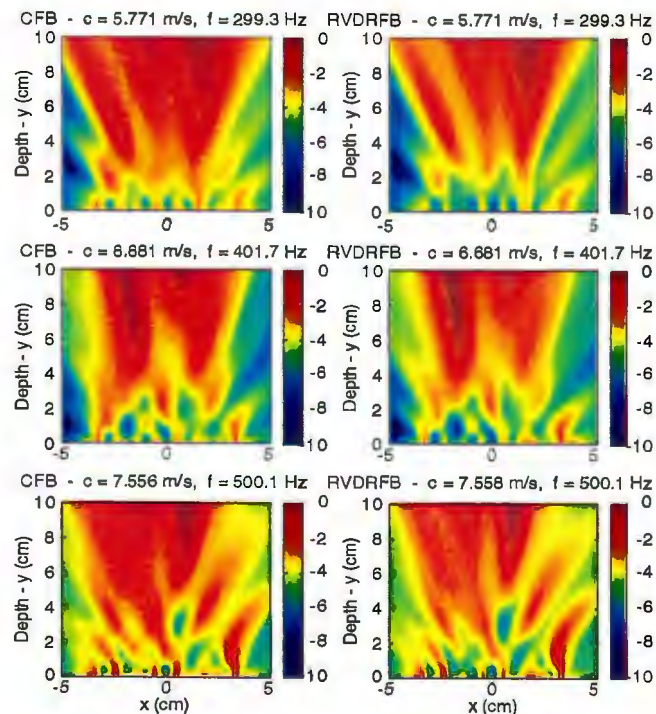


Figure B-136. Image of Data Set 923: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 923_64_256.csd
 Runname: 923_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.507
 CFB Surface Maximum Location
 X (cm): 2.755 Y (cm): 6.161
 RVDR Surface Normalization (dB): 5.856
 RVDR Surface Maximum Location
 X (cm): 2.755 Y (cm): 6.161

Frequency 200 Hz
 CFB Surface Normalization (dB): 3.394
 CFB Surface Maximum Location
 X (cm): 3.367 Y (cm): 10
 RVDR Surface Normalization (dB): 2.759
 RVDR Surface Maximum Location
 X (cm): 3.571 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.679
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.99
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

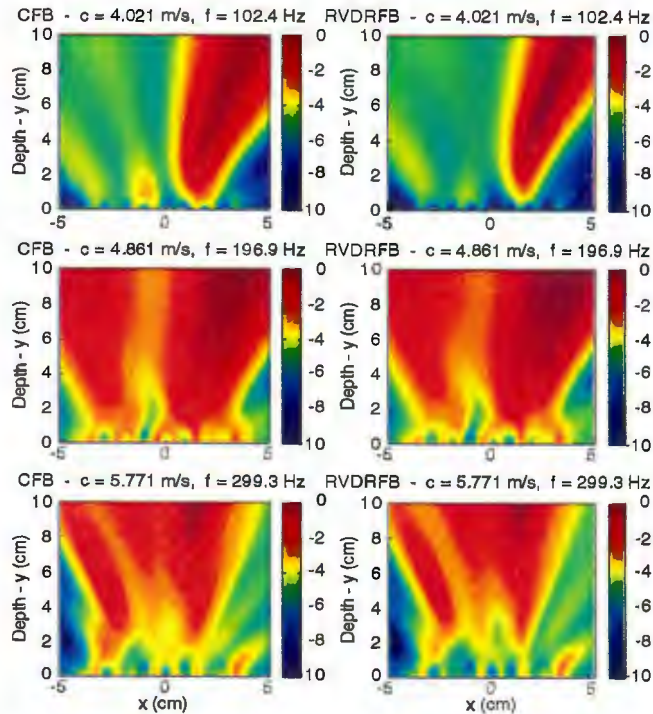


Figure B-137. Image of Data Set 923: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 923_64_256.csd
 Runname: 923_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 3.679
 CFB Surface Maximum Location
 X (cm): 1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 2.99
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.763
 CFB Surface Maximum Location
 X (cm): 0.9184 Y (cm): 10
 RVDR Surface Normalization (dB): 2.405
 RVDR Surface Maximum Location
 X (cm): 0.7143 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.197
 CFB Surface Maximum Location
 X (cm): 1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.384
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

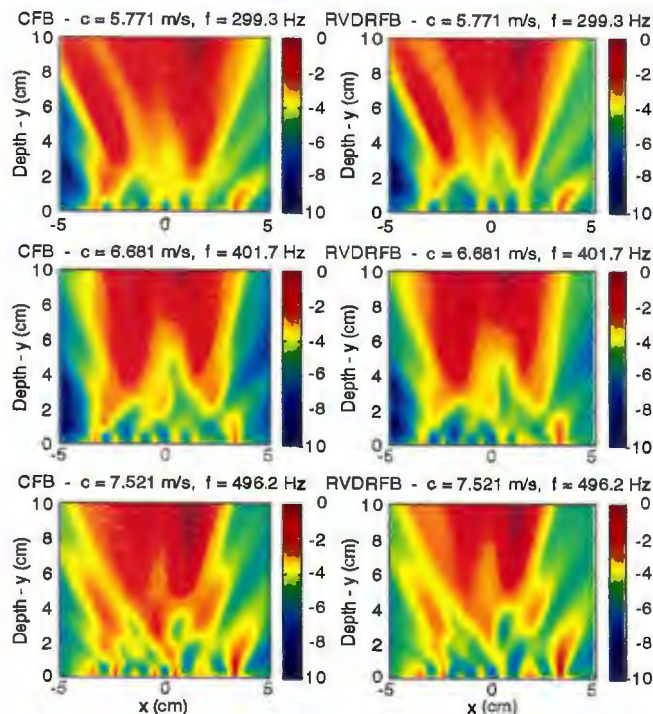


Figure B-138. Image of Data Set 923: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 924_16_1024.csd
 Runname: 924_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.264
 CFB Surface Maximum Location
 X (cm): 3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 3.461
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.675
 CFB Surface Maximum Location
 X (cm): 2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.118
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.302
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 6.565
 RVDR Surface Normalization (dB): 2.727
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 7.578

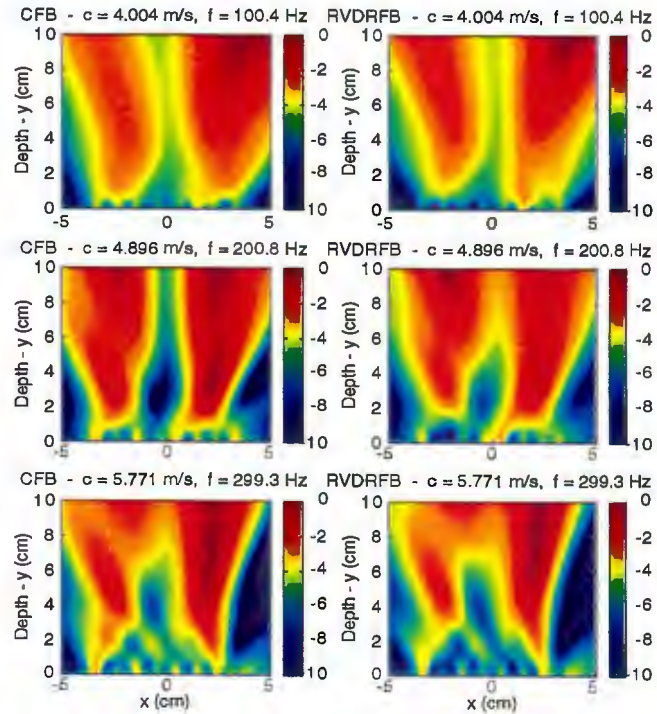


Figure B-139. Image of Data Set 924: 16 FFTs, 9 channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 924_16_1024.csd
 Runname: 924_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.302
 CFB Surface Maximum Location
 X (cm): 2.143 Y (cm): 6.565
 RVDR Surface Normalization (dB): 2.727
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 7.578

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.964
 CFB Surface Maximum Location
 X (cm): -1.939 Y (cm): 5.151
 RVDR Surface Normalization (dB): 2.476
 RVDR Surface Maximum Location
 X (cm): -1.939 Y (cm): 5.151

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.569
 CFB Surface Maximum Location
 X (cm): -1.122 Y (cm): 10
 RVDR Surface Normalization (dB): 2.729
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

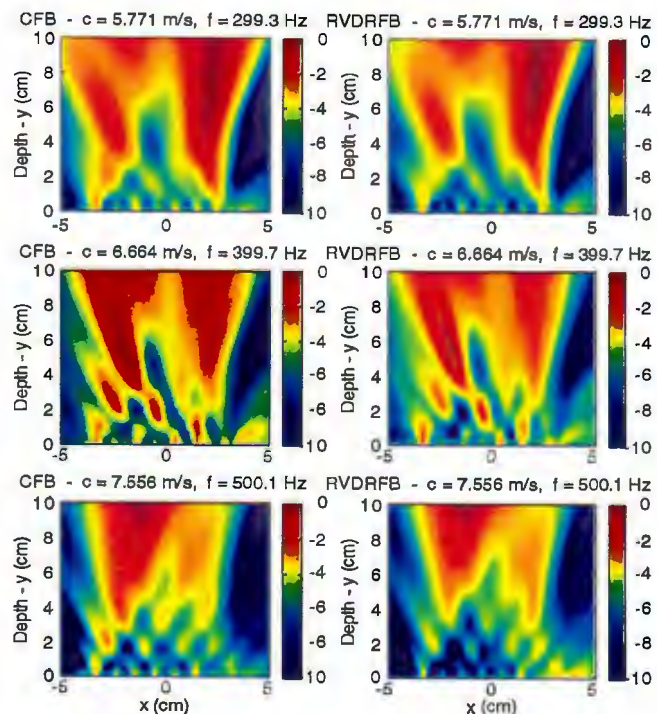


Figure B-140. Image of Data Set 924: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 924_32_512.csd
 Runname: 924_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.234
 CFB Surface Maximum Location
 X (cm): 3.571 Y (cm): 10
 RVDR Surface Normalization (dB): 3.547
 RVDR Surface Maximum Location
 X (cm): 3.571 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.929
 CFB Surface Maximum Location
 X (cm): 2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.745
 RVDR Surface Maximum Location
 X (cm): 2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.465
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.657
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

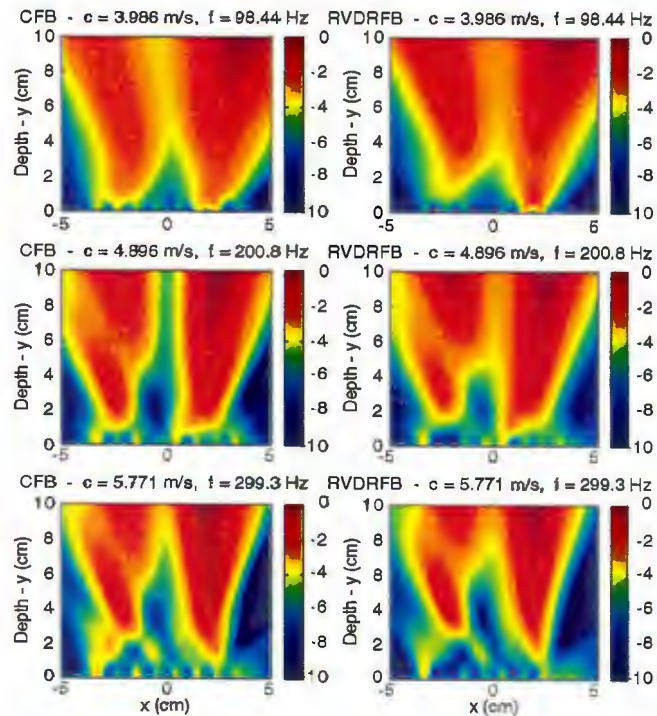


Figure B-141. Image of Data Set 924: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 924_32_512.csd
 Runname: 924_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.465
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.857
 RVDR Surface Maximum Location
 X (cm): 1.939 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.994
 CFB Surface Maximum Location
 X (cm): -2.347 Y (cm): 5.959
 RVDR Surface Normalization (dB): 2.595
 RVDR Surface Maximum Location
 X (cm): -2.347 Y (cm): 6.161

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.45
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 3.012
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

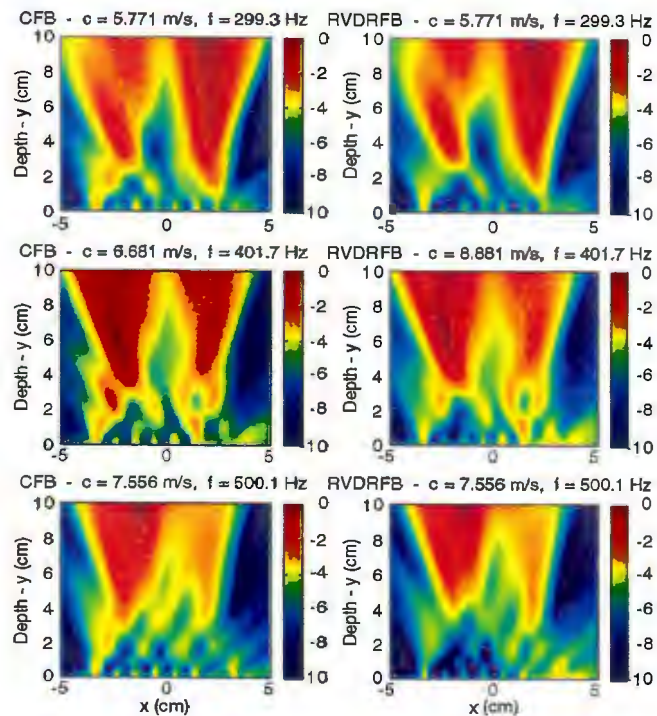


Figure B-142. Image of Data Set 924: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 924_64_256.csd
 Runname: 924_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.059
 CFB Surface Maximum Location
 X (cm): 3.776 Y (cm): 10
 RVDR Surface Normalization (dB): 3.481
 RVDR Surface Maximum Location
 X (cm): 3.776 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.517
 CFB Surface Maximum Location
 X (cm): 2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 2.566
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.376
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.559
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

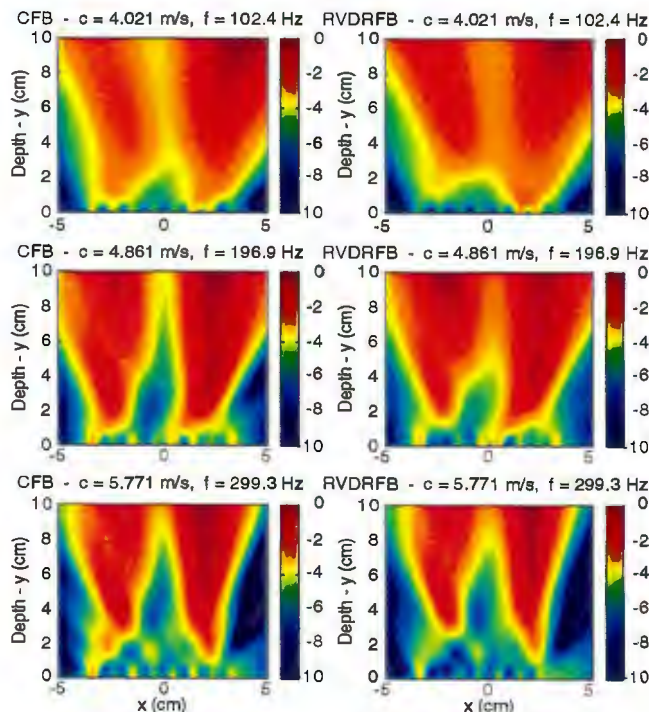


Figure B-143. Image of Data Set 924: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 924_64_256.csd
 Runname: 924_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.376
 CFB Surface Maximum Location
 X (cm): 1.939 Y (cm): 10
 RVDR Surface Normalization (dB): 2.559
 RVDR Surface Maximum Location
 X (cm): 2.143 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 3.58
 CFB Surface Maximum Location
 X (cm): -2.143 Y (cm): 5.757
 RVDR Surface Normalization (dB): 2.189
 RVDR Surface Maximum Location
 X (cm): -2.143 Y (cm): 5.757

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.7
 CFB Surface Maximum Location
 X (cm): -1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.192
 RVDR Surface Maximum Location
 X (cm): -1.735 Y (cm): 10

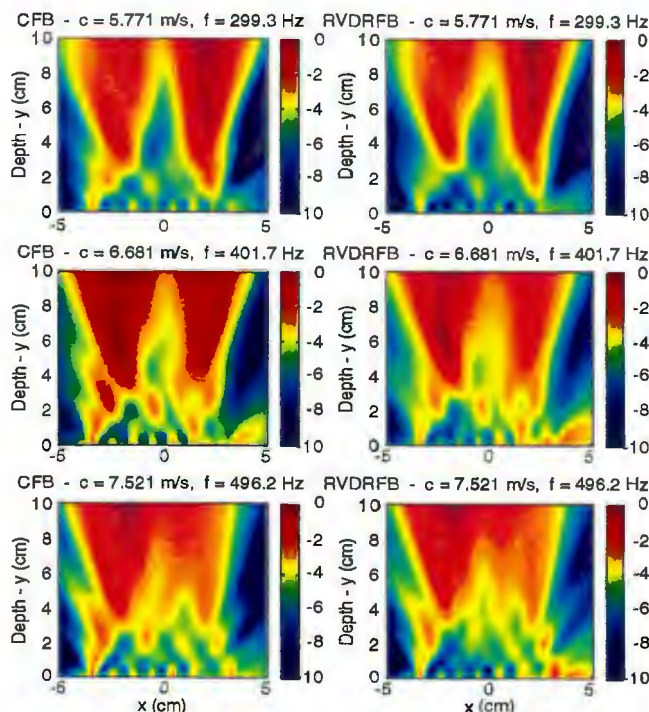


Figure B-144. Image of Data Set 924: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 925_16_1024.csd
 Runname: 925_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 6.207
 CFB Surface Maximum Location
 X (cm): 4.592 Y (cm): 10
 RVDR Surface Normalization (dB): 5.292
 RVDR Surface Maximum Location
 X (cm): 4.592 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.028
 CFB Surface Maximum Location
 X (cm): 2.755 Y (cm): 10
 RVDR Surface Normalization (dB): 2.459
 RVDR Surface Maximum Location
 X (cm): 2.755 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.536
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 5.151
 RVDR Surface Normalization (dB): 1.2
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

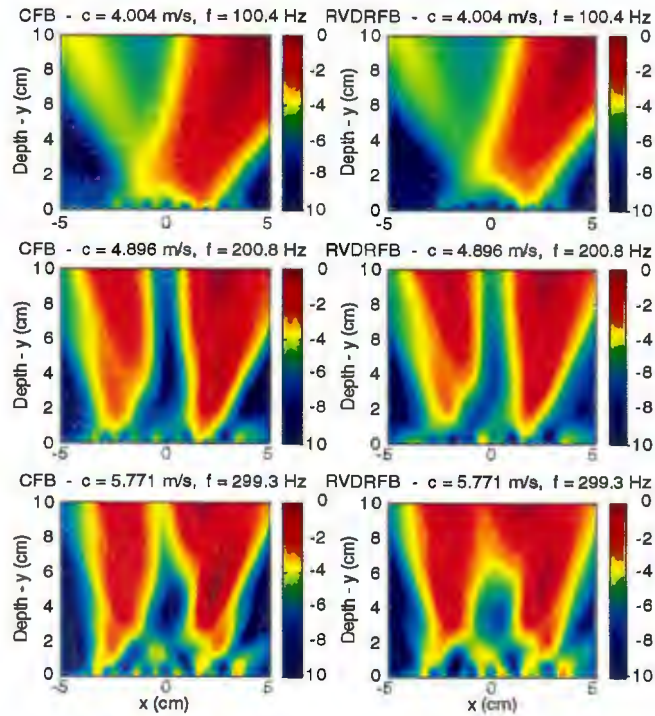


Figure B-145. Image of Data Set 925: 16 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 925_16_1024.csd
 Runname: 925_16_1024
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 16
 Number of Points per FFT: 1024
 Frequency Bin Resolution (Hz): 1.969
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.536
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 5.151
 RVDR Surface Normalization (dB): 1.2
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.473
 CFB Surface Maximum Location
 X (cm): -1.531 Y (cm): 10
 RVDR Surface Normalization (dB): 1.876
 RVDR Surface Maximum Location
 X (cm): -1.531 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.219
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.536
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

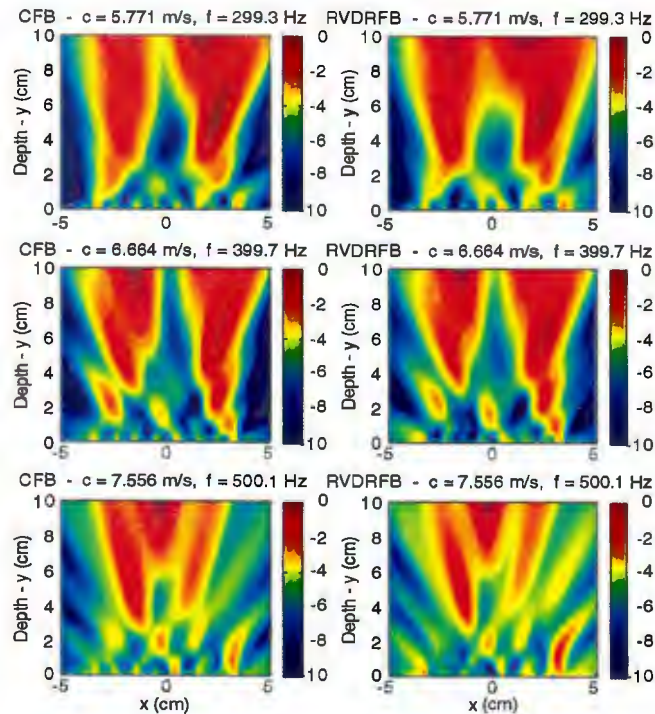


Figure B-146. Image of Data Set 925: 16 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 925_32_512.csd
 Runname: 925_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 8

Frequency 100 Hz
 CFB Surface Normalization (dB): 4.957
 CFB Surface Maximum Location
 X (cm): 4.184 Y (cm): 10
 RVDR Surface Normalization (dB): 4.213
 RVDR Surface Maximum Location
 X (cm): 4.184 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 5.3
 CFB Surface Maximum Location
 X (cm): -2.551 Y (cm): 10
 RVDR Surface Normalization (dB): 3.447
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.357
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.359
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

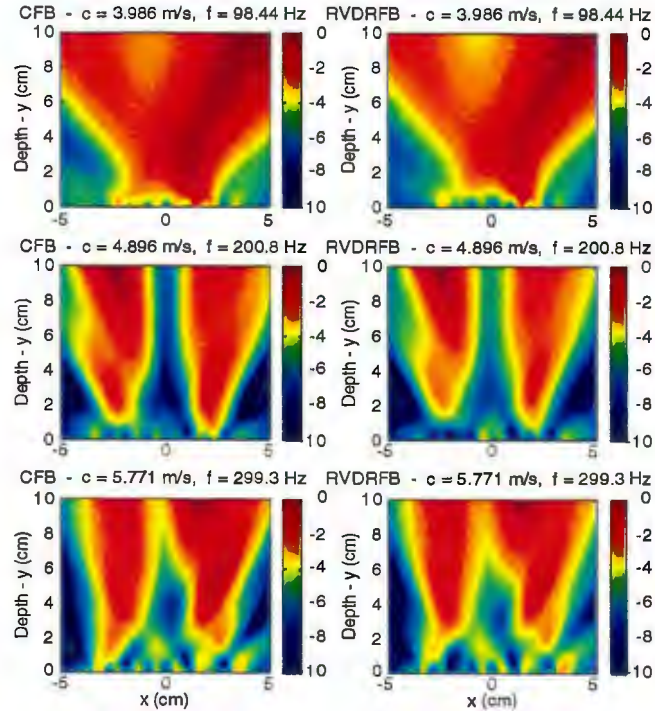


Figure B-147. Image of Data Set 925: 32 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 925_32_512.csd
 Runname: 925_32_512
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 32
 Number of Points per FFT: 512
 Frequency Bin Resolution (Hz): 3.938
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.357
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 1.86
 RVDR Surface Maximum Location
 X (cm): 1.531 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.553
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.064
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 4.305
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.627
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

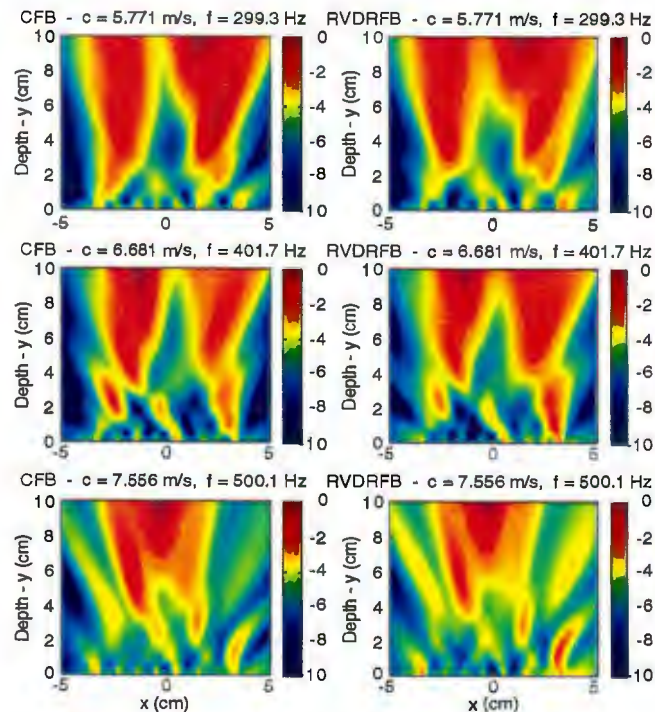


Figure B-148. Image of Data Set 925: 32 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)

Filename: 925_64_256.csd
 Runname: 925_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 100 Hz
 CFB Surface Normalization (dB): 5.176
 CFB Surface Maximum Location
 X (cm): 4.388 Y (cm): 10
 RVDR Surface Normalization (dB): 4.495
 RVDR Surface Maximum Location
 X (cm): 4.388 Y (cm): 10

Frequency 200 Hz
 CFB Surface Normalization (dB): 4.752
 CFB Surface Maximum Location
 X (cm): 2.347 Y (cm): 10
 RVDR Surface Normalization (dB): 2.873
 RVDR Surface Maximum Location
 X (cm): -2.551 Y (cm): 10

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.302
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.134
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

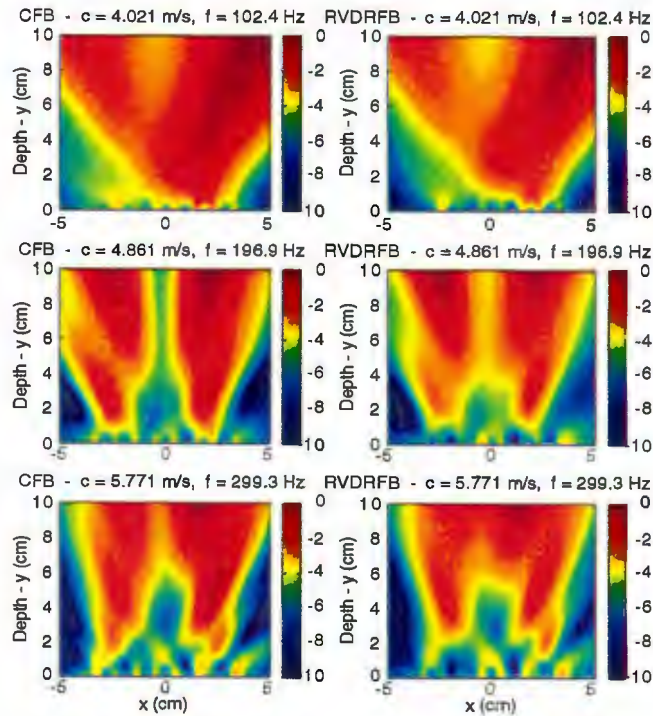


Figure B-149. Image of Data Set 925: 64 FFTs, 9 Channels Used at 100 Hz (Top), 200 Hz (Middle), and 300 Hz (Bottom)

Filename: 925_64_256.csd
 Runname: 925_64_256
 Diastolic Phase
 Spreading Parameter = 1
 9 Channels Processed
 Z Value of Cut (cm): 0
 Wave Speed Interpolation
 4 m/s at 100 Hz
 12 m/s at 1000 Hz
 Number of Temporal FFTs: 64
 Number of Points per FFT: 256
 Frequency Bin Resolution (Hz): 7.876
 RVDR Enhancement (linear): 6

Frequency 300 Hz
 CFB Surface Normalization (dB): 4.302
 CFB Surface Maximum Location
 X (cm): 1.735 Y (cm): 10
 RVDR Surface Normalization (dB): 2.134
 RVDR Surface Maximum Location
 X (cm): 1.327 Y (cm): 10

Frequency 400 Hz
 CFB Surface Normalization (dB): 4.443
 CFB Surface Maximum Location
 X (cm): -1.327 Y (cm): 10
 RVDR Surface Normalization (dB): 2.245
 RVDR Surface Maximum Location
 X (cm): -1.327 Y (cm): 10

Frequency 500 Hz
 CFB Surface Normalization (dB): 3.893
 CFB Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10
 RVDR Surface Normalization (dB): 2.315
 RVDR Surface Maximum Location
 X (cm): -0.3061 Y (cm): 10

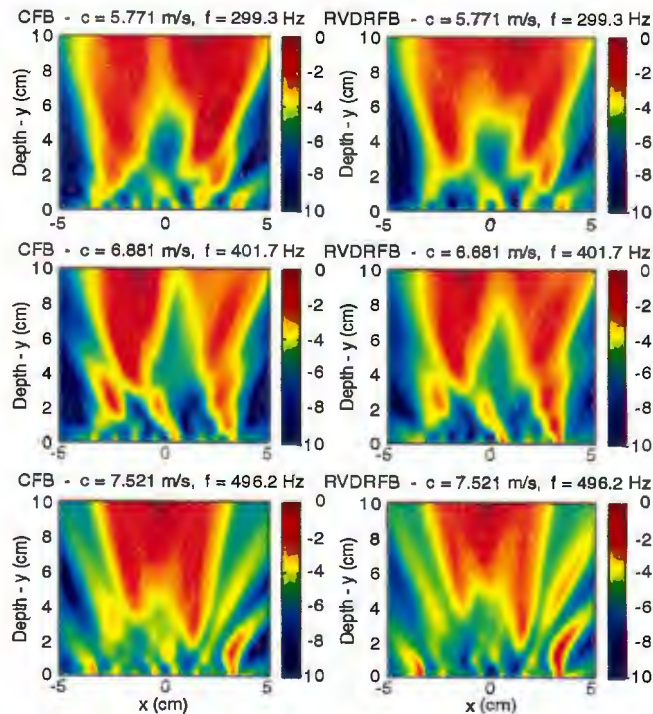


Figure B-150. Image of Data Set 925: 64 FFTs, 9 Channels Used at 300 Hz (Top), 400 Hz (Middle), and 500 Hz (Bottom)